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MINISTRY OF PUBLIC HEALTH, EGYPT.

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# ANNUAL REPORT

ON THE WORK OF THE

# Ministry of Public Health

for the Year 1945

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**Government Press, Cairo.**

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GOVERNMENT PUBLICATIONS are on sale at the "Sale Room"  
Ministry of Finance. Correspondence relating to these  
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# MINISTRY OF PUBLIC HEALTH

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## ANNUAL REPORT FOR THE YEAR 1945

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### Part I.—PUBLIC HEALTH

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#### Chapter I.—VITAL STATISTICS

##### A.—*Population.*

The population of Egypt as estimated in mid year 1945 was 17,923,300 inhabitants as against 17,625,600 inhabitants in 1944.

##### B.—*Births.*

The number of births registered during 1945 throughout the Egyptian Kingdom was 787,502 or a birth rate of 43·9 per thousand of population as compared with a birth-rate of 41 in 1944. The highest birth rate of 97·3 per thousand was recorded in Suez Governorate, and the lowest birth-rate of 32·5 was recorded in Qena Province.

##### C.—*Deaths.*

A total of 512,003 deaths were registered throughout Egypt during the year under review or a death rate of 28·6 per thousand of population as compared with 26·8 per thousand in 1944. Suez Governorate again recorded the highest death-rate of 62·4, and the lowest death-rate of 14·8 was recorded in Qena Province.

##### D.—*Diseases causing Deaths.*

Table No. 3 shows the principal diseases causing deaths in localities having a health bureau, and the death-rate of each disease as compared to total deaths. According to this table, diarrhoea and enteritis figure foremost on the list with diseases of the respiratory system following.

##### E.—*Age and Sex Distribution of Deaths.*

Table No. 2 gives the number and rate of deaths of the different age groups in localities having a health bureau. It shows that almost half the deaths occur during the first three years of life.

##### F.—*Infantile Mortality.*

A total of 120,366 infantile deaths were recorded during the year or a ratio of 153 per thousand births. 66,396 infantile deaths or 20·6 per hundred births (table No. 4) were recorded in localities having a health bureau. Again diarrhoea and enteritis were mainly responsible for these deaths. Table No. 4 gives infantile deaths distributed according to age in localities having a health bureau.



TABLE NO. 1.—SHOWING BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT DURING 1945

	Estimated Population mid 1945	Births		Deaths		Infantile Mortality	
		Number	Rate	Number	Rate	Number	Rate
<i>Governorates :—</i>							
Urban (Cities only)*	2,546,400	152,027	59·7	87,701	34·4	32,939	217
Urban and Rural ...	2,703,800	159,805	59·1	91,278	33·8	33,948	212
<i>Lower Egypt :—</i>							
Urban (Bandars only)*	1,063,500	58,160	54·7	37,392	35·2	10,895	187
Urban and Rural ...	8,013,000	350,505	43·7	233,889	29·2	49,137	140
<i>Upper Egypt :—</i>							
Urban (Bandars only)*	978,800	52,867	54·0	39,443	40·3	11,872	225
Urban and Rural ...	7,206,500	277,192	38·5	186,836	25·9	37,281	124
<i>Egypt :—</i>							
Urban (Cities and Bandars) ... ..	4,588,700	263,074	57·3	164,536	35·9	55,706	212
TOTAL (all over Egypt)	17,923,300	787,502	43·9	512,003	28·6	120,366	153

\* Urban comprises all towns having a Health Bureau provided there is a pure drinking water installation and a municipal or local council.

**TABLE NO. 2.—SHOWING AGE AND SEX DISTRIBUTION OF DEATHS IN LOCALITIES HAVING  
A HEALTH BUREAU DURING 1945**

									Number of Deaths			
									Male	Female	Total	Percentage to Total Deaths
Less than one year	...	...	...	...	...	...	...	...	34,716	31,690	66,396	32.0
1- 2 years	...	...	...	...	...	...	...	...	15,560	15,903	31,463	15.1
2- 3 „	...	...	...	...	...	...	...	...	7,832	8,080	15,912	7.7
3- 4 „	...	...	...	...	...	...	...	...	3,567	3,554	7,121	3.4
4- 5 „	...	...	...	...	...	...	...	...	2,186	1,959	4,145	2.0
5-10 „	...	...	...	...	...	...	...	...	3,245	2,877	6,122	2.9
10-15 „	...	...	...	...	...	...	...	...	2,110	1,561	3,671	1.8
15-20 „	...	...	...	...	...	...	...	...	2,045	1,481	3,526	1.7
20-25 „	...	...	...	...	...	...	...	...	2,243	1,514	3,757	1.8
25-30 „	...	...	...	...	...	...	...	...	2,680	1,782	4,462	2.1
30-35 „	...	...	...	...	...	...	...	...	2,387	1,817	4,204	2.0
35-40 „	...	...	...	...	...	...	...	...	2,699	1,714	4,413	2.1
40-45 „	...	...	...	...	...	...	...	...	2,523	1,632	4,155	2.0
45-50 „	...	...	...	...	...	...	...	...	2,378	1,255	3,633	1.7
50-55 „	...	...	...	...	...	...	...	...	3,184	1,865	5,049	2.4
55-60 „	...	...	...	...	...	...	...	...	1,772	874	2,646	1.3
60-65 „	...	...	...	...	...	...	...	...	3,224	1,848	5,072	2.4
65-70 „	...	...	...	...	...	...	...	...	2,723	1,753	4,476	2.2
70-75 „	...	...	...	...	...	...	...	...	3,810	3,037	6,847	3.3
75-80 „	...	...	...	...	...	...	...	...	1,800	1,474	3,274	1.6
80-85 „	...	...	...	...	...	...	...	...	3,015	3,545	6,560	3.2
85-90 „	...	...	...	...	...	...	...	...	982	1,086	2,068	1.0
90-95 „	...	...	...	...	...	...	...	...	2,072	2,918	4,990	2.4
95 years and upwards	...	...	...	...	...	...	...	...	1,361	2,202	3,563	1.7
Unknown	...	...	...	...	...	...	...	...	104	52	156	0.1
<b>TOTAL</b> ... ..									<b>110,218</b>	<b>97,463</b>	<b>207,681</b>	<b>100</b>

TABLE NO. 3.—SHOWING DISEASES CAUSING DEATHS IN ALL LOCALITIES HAVING A HEALTH BUREAU DURING 1945

Disease	Total Number of Deaths	Death-rate per 1000 of Total Deaths
Notifiable infectious and parasitic diseases exclusive of those marked * hereunder ... ..	5,856	28.2
Pulmonary tuberculosis* ... ..	3,604	17.4
Other tuberculous diseases ... ..	487	2.3
Syphilis ... ..	238	1.1
Malaria* ... ..	105	0.5
Dysentery ... ..	511	2.5
Pneumonia (acute, chronic and non-chronic, including broncho-pneumonia and capillary bronchitis) ... ..	6,861	33.0
Bronchitis ... ..	15,459	74.4
Other respiratory system diseases ... ..	2,515	12.1
Heart diseases ... ..	4,728	22.8
Other diseases of the circulatory system ... ..	1,496	7.2
Diseases of urinary and genital system (other than Venereal) ... ..	7,482	36.0
Diseases of puerperium and delivery (other than puerperal septicemia)... ..	894	4.3
Diseases of diarrhoea and enteritis ... ..	82,682	398.1
Senility ... ..	21,285	102.5
Accidental deaths including suicides ... ..	6,176	29.7
Other causes ... ..	47,303	227.8
<b>TOTAL DEATHS ... ..</b>	<b>207,681</b>	<b>1000</b>

TABLE NO. 4.—SHOWING THE AGE AND SEX DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING A HEALTH BUREAU DURING 1945

Age	Male	Female	Total	Death-rate per 100 Births	Death-rate per 100 Deaths
0- 1 month ... ..	7,459	6,054	13,513	4.2	6.5
1- 2 months ... ..	2,725	2,356	5,081	1.6	2.4
2- 3 „ ... ..	2,785	2,661	5,446	1.7	2.6
<b>0- 3 „ ... ..</b>	<b>12,969</b>	<b>11,071</b>	<b>24,040</b>	<b>7.5</b>	<b>11.6</b>
3- 4 „ ... ..	2,976	2,767	5,743	1.8	2.8
4- 5 „ ... ..	2,905	2,645	5,550	1.7	2.7
5- 6 „ ... ..	2,442	2,387	4,829	1.5	2.3
<b>3- 6 „ ... ..</b>	<b>8,323</b>	<b>7,799</b>	<b>16,122</b>	<b>5.0</b>	<b>7.8</b>
6- 7 „ ... ..	3,053	2,873	5,926	1.8	2.9
7- 8 „ ... ..	2,376	2,205	4,581	1.4	2.2
8- 9 „ ... ..	2,800	2,735	5,535	1.7	2.7
<b>6- 9 „ ... ..</b>	<b>8,229</b>	<b>7,813</b>	<b>16,042</b>	<b>5.0</b>	<b>7.7</b>
9-10 „ ... ..	2,102	2,004	4,106	1.3	2.0
10-11 „ ... ..	1,961	1,864	3,825	1.2	1.8
11-12 „ ... ..	1,132	1,129	2,261	0.7	1.1
<b>9-12 „ ... ..</b>	<b>5,195</b>	<b>4,997</b>	<b>10,192</b>	<b>3.2</b>	<b>4.9</b>
<b>GRAND TOTAL ... ..</b>	<b>34,716</b>	<b>31,680</b>	<b>66,396</b>	<b>20.6</b>	<b>32.0</b>



TABLE NO. 5.—SHOWING DISEASE DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING  
A HEALTH BUREAU DURING 1945

Disease	Number of Deaths	Rate per 1000 to Total Births	Rate per 1000 to Total Infantile Mortality
Measles ... ..	151	0·5	2·3
Whooping Cough ... ..	28	0·1	0·4
Diphtheria ... ..	85	0·3	1·3
Tuberculous Diseases ... ..	11	—	0·2
Syphilis ... ..	130	0·4	2·0
Rickets and Osteomalacia ... ..	176	0·5	2·7
Convulsions ... ..	213	0·7	3·2
Bronchitis ... ..	4,211	13·1	63·4
Broncho-Pneumonia ... ..	959	3·0	14·4
Pneumonia ... ..	393	1·2	5·9
Diarrhoea and Enteritis ... ..	37,173	115·2	559·9
Congenital Defects of Conformation ... ..	199	0·6	3·0
Congenital Debility ... ..	20,318	63·0	306·0
Pre-mature Birth ... ..	128	0·4	1·9
Consequences of Delivery ... ..	113	0·4	1·7
Infanticide ... ..	86	0·3	1·3
Accidents ... ..	113	0·4	1·7
Other Causes ... ..	1,909	5·9	28·8
<b>TOTAL ... ..</b>	<b>66,396</b>	<b>205·8</b>	<b>1000</b>

TABLE NO. 6.—SHOWING THE HIGHEST AND LOWEST BIRTH AND DEATH RATES DURING 1945  
IN GOVERNORATES, PROVINCES AND TOWNS HAVING A HEALTH BUREAU

	Govts., Prov. or Town having a Health Bureau	Rate per Thousand
<b>BIRTHS</b>		
Governorate or Province with highest birth-rate ... ..	Suez and its Suburbs	97·3
"    "    "    "    lowest    "    ... ..	Qena ... ..	32·5
Town or <i>Bandar</i> (chief town) with highest birth-rate ... ..	Suez ... ..	102·2
"    "    "    "    lowest    "    ... ..	Alahi ... ..	20·7
<b>DEATHS</b>		
Governorate or Province with highest death-rate ... ..	Suez and its Suburbs	62·4
"    "    "    "    lowest    "    ... ..	Qena ... ..	14·8
Town or <i>Bandar</i> (chief town) with highest death-rate ... ..	Sau bu ... ..	79·7
"    "    "    "    lowest    "    ... ..	Gabaris ... ..	7·5
<b>INFANTILE MORTALITY</b>		
Governorate or Province with highest infantile mortality ... ..	Suez and its suburbs	244
"    "    "    "    lowest    "    ... ..	Qena ... ..	77
Town or <i>Bandar</i> (chief town) with highest infantile mortality ... ..	Beni Suef ... ..	287
"    "    "    "    lowest    "    ... ..	Port Fouad ... ..	108

The birth-rate for all the population of Egypt was 43·9 per thousand.

TABLE No. 7.—BIRTHS AND DEATHS RETURN FOR GOVERNORATES AND CHIEF TOWNS OF PROVINCES FOR 1945

Governorates and Chief Towns of Provinces			Estimated Population mid year 1945			Births			Deaths				Infantile Mortality		Percentage of Infantile Mortality		
						Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 Population	Under one year	1-9 years	Under one year	1-9 years
														Births	Deaths	Births	Deaths
<i>Governorates:—</i>																	
Cairo ...	...	...	...	...	...	1,021	90,467	60.5	49,914	645	50,559	33.8	18,725	20.7	37.1	27.1	27.1
Alexandria ...	...	...	...	...	...	1,578	42,816	55.5	25,706	1,058	26,764	34.7	10,355	24.2	38.7	31.3	31.3
Ismailia (Town) ...	...	...	...	...	...	143	3,579	83.6	1,780	121	1,901	44.4	667	18.6	35.1	25.0	25.0
Port Said ...	...	...	...	...	...	149	7,251	53.4	3,599	130	3,729	27.5	1,365	18.8	36.6	30.0	30.0
Damietta ...	...	...	...	...	...	—	2,610	54.3	1,270	—	1,270	26.4	481	18.4	37.9	28.5	28.5
Suez (Town) ...	...	...	...	...	...	69	5,211	102.2	3,355	99	3,454	67.7	1,312	25.2	8.0	26.1	26.1
<i>Lower Egypt:—</i>																	
Benha ...	...	...	...	...	...	—	1,779	52.8	1,154	3	1,157	34.3	329	18.5	28.4	30.6	30.6
Damanhour ...	...	...	...	...	...	2	4,150	57.0	2,285	—	2,285	31.4	797	19.2	34.9	28.5	28.5
Mansoura ...	...	...	...	...	...	10	4,105	51.1	2,518	6	2,524	31.4	704	17.1	27.9	28.8	28.8
Shebin el Kom ...	...	...	...	...	...	—	1,827	50.8	1,312	—	1,312	36.4	459	25.1	35.0	23.1	23.1
Tanta ...	...	...	...	...	...	7	5,362	50.1	3,119	9	3,128	29.2	930	17.9	30.7	26.9	26.9
Zagazig ...	...	...	...	...	...	3	3,771	54.7	2,199	1	2,200	31.9	724	19.2	32.9	29.4	29.4
<i>Upper Egypt:—</i>																	
Assiut ...	...	...	...	...	...	2	3,037	46.5	2,025	2	2,027	31.0	601	19.8	29.6	26.1	26.1
Aswân ...	...	...	...	...	...	1	919	41.6	534	3	537	24.3	177	19.3	33.0	24.2	24.2
Beni Suef ...	...	...	...	...	...	2	2,442	49.2	2,260	—	2,260	45.6	700	28.7	31.0	26.5	26.5
Fayoum ...	...	...	...	...	...	—	3,375	50.0	2,597	—	2,597	38.5	963	28.5	37.1	25.8	25.8
Giza ...	...	...	...	...	...	85	4,714	70.1	2,626	14	2,640	39.3	1,031	21.9	39.1	27.5	27.5
Minia ...	...	...	...	...	...	5	2,850	51.7	2,667	3	2,670	48.5	786	27.6	29.4	26.6	26.6
Qena ...	...	...	...	...	...	—	1,936	52.0	1,264	—	1,264	34.0	455	23.5	36.0	27.9	27.9
Souhag ...	...	...	...	...	...	—	1,972	54.2	1,395	1	1,396	28.4	467	23.7	33.5	33.1	33.1
<b>TOTAL</b> ...	...	...	...	...	...	<b>3,077</b>	<b>194,173</b>	<b>58.1</b>	<b>113,579</b>	<b>2,095</b>	<b>115,674</b>	<b>34.6</b>	<b>42,082</b>	<b>21.7</b>	<b>36.4</b>	<b>28.2</b>	<b>28.2</b>



TABLE No. 8.—BIRTHS AND DEATHS RETURN FOR EGYPT, 1945

Governorates and Provinces		Estimated Population mid 1945	Births			Deaths			Infantile Mortality	
			Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 Births
<b>Governorates:—</b>										
Cairo ... ..	...	1,494,600	89,446	1,021	90,467	60.5	49,914	645	50,559	33.8
Alexandria ... ..	...	771,900	41,238	1,578	42,816	55.5	25,706	1,058	26,764	34.7
Ismailia (including suburbs) ... ..	...	61,900	4,421	143	4,564	73.7	2,223	121	2,344	37.9
Port Said (including suburbs) ... ..	...	144,700	7,571	152	7,723	53.4	3,839	133	3,972	27.5
Suez (including suburbs) ... ..	...	57,900	5,563	69	5,635	97.3	3,513	99	3,612	62.4
Damietta ... ..	...	48,100	2,610	—	2,610	54.3	1,270	—	1,270	26.4
Sinai ... ..	...	20,500	1,253	—	1,253	61.1	496	—	496	24.2
Southern Desert ... ..	...	33,700	1,609	—	1,609	47.7	861	—	861	25.5
Western Desert ... ..	...	59,900	2,760	—	2,760	46.1	1,221	—	1,221	20.4
Red Sea District ... ..	...	10,800	368	—	368	34.1	179	—	179	16.6
<b>TOTAL ... ..</b>	<b>...</b>	<b>2,703,800</b>	<b>156,842</b>	<b>2,963</b>	<b>159,805</b>	<b>59.1</b>	<b>89,222</b>	<b>2,656</b>	<b>91,878</b>	<b>33.8</b>
<b>Lower Egypt Provinces:—</b>										
Behera... ..	...	1,191,700	50,705	4	50,709	42.6	23,879	7	23,886	24.2
Dakahlia ... ..	...	1,381,400	65,078	14	65,092	47.1	43,312	11	43,323	31.4
Gharbia ... ..	...	2,224,500	96,467	18	96,489	43.4	65,351	25	65,376	29.4
Menoufia ... ..	...	1,272,700	52,051	—	52,051	40.9	39,749	2	39,751	31.2
Kalubia ... ..	...	685,300	32,319	5	32,324	47.2	21,194	5	21,199	30.9
Sharkia ... ..	...	1,257,400	53,837	7	53,844	42.8	35,350	4	35,354	28.1
<b>TOTAL ... ..</b>	<b>...</b>	<b>8,013,000</b>	<b>350,457</b>	<b>48</b>	<b>350,505</b>	<b>43.7</b>	<b>233,835</b>	<b>54</b>	<b>233,889</b>	<b>29.2</b>
<b>Upper Egypt Provinces:—</b>										
Aswan ... ..	...	311,200	12,460	1	12,461	40.0	6,050	4	6,054	19.5
Assiut ... ..	...	1,353,200	53,320	2	53,322	39.4	41,838	3	41,841	20.9
Beni Suef ... ..	...	634,500	22,067	2	22,069	34.8	17,436	—	17,436	27.5
Fayoum ... ..	...	664,500	27,582	—	27,582	41.5	19,465	—	19,465	29.3
Gerga ... ..	...	1,287,400	44,217	—	44,217	34.3	24,559	1	24,560	19.1
Giza ... ..	...	794,200	38,753	85	38,838	48.9	24,756	71	24,827	31.1
Minia ... ..	...	1,039,600	42,196	6	42,202	40.6	36,002	4	36,006	34.6
Qena ... ..	...	1,121,900	36,501	—	36,501	32.5	16,645	2	16,647	14.8
<b>TOTAL ... ..</b>	<b>...</b>	<b>7,206,500</b>	<b>277,096</b>	<b>96</b>	<b>277,192</b>	<b>38.5</b>	<b>186,751</b>	<b>85</b>	<b>186,836</b>	<b>25.9</b>
<b>GRAND TOTAL ... ..</b>	<b>...</b>	<b>17,923,300</b>	<b>784,395</b>	<b>3,107</b>	<b>787,502</b>	<b>43.9</b>	<b>509,808</b>	<b>22,195</b>	<b>512,003</b>	<b>28.6</b>

## Chapter II.—INFECTIOUS DISEASES

The total number of cases of infectious diseases reported during this year throughout the Egyptian Kingdom was 235,700 or a ratio of 1322·7 per hundred thousand of population. Of this number, 18,612 died, i.e. 104 per 100,000 population, as compared with 335,391 cases and 23,071 deaths or a ratio of 1903 and 131 per 100,000 population respectively during the previous year.

### TYPHUS :

The following table No. 9 gives the number of typhus cases and deaths reported during this year, their ratios per 100,000 of population and the case mortality rates compared with corresponding figures for the last four years.

TABLE No. 9

Year	Number of Cases	Case Rate per 100,000 of Population	Number of Deaths	Death Rate per 100,000 of Population	Case-Mortality Rate per cent
1941 ... ..	9,414	56	1,751	10·4	18·6
1942 ... ..	22,054	128	4,411	25·8	20·0
1943 ... ..	40,188	230	8,272	47·4	20·5
1944 ... ..	18,477	104·8	4,043	22·9	21·8
1945 ... ..	18,283	102·6	3,627	20·3	19·8

This table shows that the number of typhus cases recorded during this year was 194 cases less than the previous year. The precautionary preventive measures adopted in the previous year were still in progress on a larger scale this year covering all parts of the country.

### *Distribution of Typhus Cases according to Localities .*

Table No. 14 gives the distribution of typhus cases and deaths according to Governorates and Provinces during the last ten years. It is to be observed from this table that although the disease was present during 1945 in all localities, the incidence was less than in the previous year.

### *Four-Weekly Distribution of Typhus Cases .*

Table No. 15 gives the four weekly distribution of cases of typhus compared with corresponding figures as far back as 1935.

During the first four weeks of 1945, 1,243 cases of typhus were recorded. The incidence of the diseases continued its upward trend until the four weeks ending April 22, 1945, when the maximum of 3,959 cases was recorded. Since then, it began its gradual descent until a minimum of 99 cases was recorded during the four weeks ending the 48th week, only to begin a new rise with 219 cases recorded during the last four weeks of the year.

### *Typhus Cases and Deaths .*

A total of 18,283 cases of typhus were reported during the year or a ratio of 1026 per million of population as compared with 18,477 and a ratio of 1048 per million during 1944.



# RELAPSING FEVER

A total of 18,126 cases of relapsing fever were recorded during this year. Two upward curves marked the incidence of the disease. The first began by 33 cases recorded during the first four weeks of the year. The peak was reached during the four weeks ending the 28th week (15th July) when a maximum of 2,013 cases was recorded. The down trend of the curve continued until the four weeks ending the 40th week when a minimum of 1,073 cases was recorded. The second upward curve followed immediately afterwards so that by the end of the year 3,289 cases were recorded.

# PLAGUE

The total number of cases of plague reported during the year was 218. The following table No. 10 shows the progress of the disease during the last four years.

TABLE No. 10

Year	Bubonic			Septicæmic			Pneumonic			Total		
	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.	Cases	Deaths	C.M.R.
			%			%			%			%
1942	7	3	42·9	3	3	100	4	4	100	14	10	66·5
1943	149	95	63·7	14	14	100	—	—	—	163	109	66·8
1944	638	387	60·6	6	6	100	—	—	—	644	393	61
1945	202	92	45·5	16	16	100	—	—	—	218	108	49·5

## Regional Distribution of Plague.

Plague was confined this year to Ismailia and suburbs, Port-Said and Suez. It was severe in the first with a total of 122 cases recorded during the period between April and July 1945. 74 cases were reported in Port-Said and 22 in Suez between February and December. The following table No. 11 gives the monthly distribution of cases.

TABLE No. 11

Locality	Jan.		Feb.		Mar.		Apr.		May		June		Jul.		Aug.		Sep.		Oct.		Nov.		Dec.		Total	
	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.
Ismailia ... ..	—	—	—	—	—	—	45	1	32	5	23	6	8	2	—	—	—	—	—	—	—	—	—	—	108	14
Port-Said ... ..	—	—	2	—	—	—	1	—	12	—	23	1	26	—	7	—	—	—	1	—	—	—	1	—	73	1
Suez... ..	—	—	1	—	—	—	—	—	6	—	5	—	4	—	—	—	—	—	2	1	—	—	3	—	21	1

## Anti-Plague Vaccination.

Anti-Plague vaccination was naturally restricted to Ismailia and suburbs, Port-Said and Suez. In Ismailia and Port-Said, 9,420 persons received one vaccination and 9,624 persons received two vaccinations. 4,903 persons were vaccinated in Suez. Other precautionary vaccinations were carried out in certain localities in Behera, Dakahlia, Sharkia, Fayoum, Minia, Gerga, Qena, and Aswan Provinces and in Cairo.

## Deratization.

The posts set up in 1941 for deratization of river-craft to prevent the escape of rats from the ports to the interior and vice-versa are still in operation together with the other posts set up in 1942. A total of 89,638 river-craft were provided with traps during 1945. These caught 101,874 live rats and 2,077 dead. To this may be added rats caught by rat gangs in towns and villages. As a result of this control, not a single case of plague was reported from the interior of the country.

## TYPHOID AND PARATYPHOID

A total of 5,286 cases with 833 deaths were notified during the year throughout Egypt or a case-rate of 29·6 and a death-rate of 4·6 per 100,000 population and a case-mortality-rate of 15·7 per cent, as compared with 5,019 cases and 790 deaths or a case-rate of 28·5 and a death-rate of 4·5 per 100,000 population during the previous year.

## SMALL POX

1,355 cases of small pox with 115 deaths were notified during the year, or a case-mortality-rate of 8·4 per cent. Cases of small pox were recorded in almost all parts of the country but were evident in Gharbia, Behera, Dakahlia, Minia, Menoufia, Fayoum and Giza Provinces and Cairo and Alexandria, and scarce in Suez, Port-Said, Frontier Districts, Qena, Beni-Suef, Assiut, and Damietta. No cases were recorded in either Aswan or Gerga Provinces.

In view of the occurrence of small pox in almost all the localities, anti small pox general vaccination of the population was continued. A total of 2,535,985 persons were vaccinated during the year.

## CEREBRO SPINAL FEVER

65 cases of cerebro spinal fever with 49 deaths were recorded during the year or a case-rate of 0·36 and a death-rate of 0·27 per 100,000 population and a case-mortality-rate of 75 per cent, as compared with 147 cases with 75 deaths in 1944 or a case-rate of 0·83 and a death-rate of 0·43 per 100,000 population and a case-mortality-rate of 51 per cent. Most of the cases were reported from Cairo, Alexandria and Gharbia Province.

## DIPHTHERIA

Some 3,130 cases of diphtheria with 1,159 deaths were notified during 1945 or a case-rate of 17·56 and a death-rate of 6·5 per 100,000 population and a case-mortality-rate of 37 per cent as against 3,326 cases and 1,264 deaths in 1944 or a case-rate of 18·9 and a death-rate of 7·2 per 100,000 of population and a case-mortality-rate of 38 per cent. Fewer cases than in 1944 were recorded in all parts of the country except Cairo where there was an increase.

## DIPHTHERIA ANATOXIN IMMUNIZATION

A total of 168,221 children between one and ten years of age received the three anatoxin injections for immunization against diphtheria. Of these, 135 children developed diphtheria after immunization and were distributed as follows: 1 in Behera, 18 in Qena, 59 in Cairo and 47 in Alexandria.

## MEASLES

5,444 cases of measles with 1,413 deaths were notified during the year or a case-rate of 30·5 and a death-rate of 7·9 per 100,000 population and a case-mortality-rate of 25·9 per cent as compared with 7,274 cases and 2,475 deaths in 1944 or a case-rate of 41·3 and a death-rate of 14 per 100,000 of population and a case-mortality-rate of 34 per cent. Fewer cases than in 1944 were recorded throughout the country except Damietta, Dakahlia, Assiut, Gerga and Minia Provinces.

## INFLUENZA

The number of cases of influenza notified during the year was 14,642 with 152 deaths or a case-rate of 82·16 and a death-rate of 0·85 per 100,000 of population and a case-mortality-rate of 1·03 per cent as compared with 11,203 cases and 204 deaths in the previous year or a case-rate of 63·6 and a death-rate of 1·15 per 100,000 of population and a case-mortality-rate of 1·8 per cent.

## PNEUMONIA

Some 5,805 cases of pneumonia with 4,848 deaths were notified during the year giving a case-rate of 32·5 and a death-rate of 27·2 per 100,000 of population and a case-mortality-rate of 83·5 per cent as compared with 6,929 cases and 5,242 deaths in 1944 or a case-rate of 39·3 and a death-rate of 29·7 per 100,000 of population and a case-mortality-rate of 75·6 per cent.



### FEVER HOSPITALS

The number of fever hospitals in operation during the year was 20 built up hospitals, 15 shelters and 28 cordons made up of tents. The number of patients admitted into these hospitals during the year was 79,812 (43,621 males and 36,191 females). 72,077 of these (39,207 males and 32,870 females) were discharged as cured and 5,156 (3,333 males and 1,823 females) died.

### PILGRIMS

The number of Egyptian pilgrims who proceeded to the Hedjaz this year was 14,984 14,984 returning pilgrims passed through Tor Lazaret. No deaths occurred in the Hedjaz among Egyptian pilgrims.

TABLE NO. 12.—MONTHLY DEATH-RATE PER 1,000 POPULATION IN EGYPT FROM 1935-1945

Month	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
January ... ..	27·0	21·7	28·5	25·1	24·1	25·8	23·3	24·6	26·0	28·0	23·6
February... ..	21·3	21·3	19·4	20·9	18·7	19·9	19·1	24·1	21·7	23·3	20·9
March ... ..	21·4	22·2	21·3	21·2	20·1	21·8	20·6	23·8	25·1	23·4	22·8
April ... ..	21·8	24·4	24·7	20·5	21·0	25·5	22·6	27·8	26·0	25·3	21·9
May ... ..	27·3	29·7	30·9	25·9	27·9	31·8	29·4	34·2	30·3	29·2	29·1
June ... ..	33·2	31·8	31·5	29·0	30·9	32·1	31·1	39·5	31·8	32·9	36·1
July ... ..	32·8	34·2	32·9	34·8	34·9	32·7	32·3	33·9	33·8	33·7	39·1
August ... ..	29·6	34·7	31·4	34·5	31·4	29·0	31·8	28·1	31·3	29·9	37·3
September ... ..	26·0	29·5	27·0	28·4	26·1	24·7	26·1	24·8	26·3	25·2	31·5
October ... ..	26·5	30·1	27·3	25·7	24·9	24·0	24·7	25·1	29·5	24·3	27·7
November ... ..	25·4	30·4	25·0	24·9	25·0	24·2	24·5	25·4	27·5	2·3	25·0
December ... ..	24·3	35·8	26·6	25·8	27·0	26·3	25·4	25·6	30·0	22·8	27·7
TOTAL ... ..	26·4	28·8	27·2	26·4	26·0	26·5	25·9	28·7	28·3	26·8	28·6

TABLE NO. 13.—BIRTH AND DEATH RATES IN EGYPT—RATIO OF BIRTHS AND DEATHS PER 1,000 POPULATION

Governorate or Mudiria	1937			1938			1939			1940		
	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate
Cairo ... ..	44·7	25·8	192	42·2	28·1	204	45·0	25·8	190	43·3	26·8	197
Alexandria ... ..	42·6	27·9	222	42·3	24·7	202	41·8	24·1	197	37·7	22·3	188
Ismailia ... ..	50·6	26·3	182	51·6	24·2	205	50·8	23·8	168	53·2	26·9	186
Port-Said ... ..	41·4	22·4	163	41·0	20·8	157	38·9	24·1	166	38·7	18·1	131
Damietta ... ..	45·4	26·1	173	44·2	22·2	134	42·5	22·5	149	45·1	22·1	148
Suez ... ..	50·9	30·2	231	51·4	27·6	220	54·1	32·1	245	57·7	31·5	204
Frontier Districts ... ..	32·5	23·0	163	39·6	17·0	132	37·7	18·0	140	38·1	31·3	136
Behera ... ..	36·5	23·6	126	38·9	22·6	112	37·9	22·5	118	36·9	23·6	126
Dakahlia ... ..	48·3	32·1	171	48·7	28·1	159	46·3	29·5	160	46·0	30·5	163
Gharbia ... ..	44·0	27·8	151	44·8	27·3	153	43·6	27·3	148	43·9	28·6	151
Menoufia ... ..	46·0	31·3	173	44·3	31·5	188	43·4	29·7	168	43·6	32·3	185
Kaliubia ... ..	45·6	29·9	172	45·3	32·9	182	44·5	30·0	170	43·7	32·1	182
Sharkia ... ..	41·6	26·7	143	45·3	25·5	135	42·1	26·1	138	41·6	25·3	134
Aswan ... ..	36·6	27·3	149	34·6	24·2	150	34·5	21·7	128	54·5	24·6	144
Assiut ... ..	45·4	26·5	166	25·3	25·2	157	43·1	28·4	175	43·1	27·0	164
Beni-Suef ... ..	41·8	23·8	153	40·0	24·3	166	39·5	23·6	153	38·7	21·6	138
Fayoum ... ..	44·0	35·6	235	45·0	31·5	242	45·3	33·4	231	42·7	30·0	214
Gerga ... ..	46·2	23·9	132	44·6	23·2	129	41·8	21·6	126	41·8	23·5	132
Giza ... ..	48·6	29·2	174	45·4	31·3	187	47·1	27·1	173	46·4	28·9	178
Minia ... ..	42·4	29·3	202	43·2	26·2	182	40·8	27·1	187	40·8	26·8	184
Qena ... ..	37·5	18·0	118	35·7	19·6	127	32·3	17·3	130	33·3	17·9	123
TOTAL ... ..	53·5	27·2	165	43·4	26·4	163	42·2	26·0	160	41·6	26·5	162



AND INFANTILE MORTALITY RATE PER 1,000 BIRTHS FROM 1937-1945.

1941			1942			1943			1944			1945		
Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate
45.0	28.8	198	46.3	36.9	247	53.1	37.7	237	58.9	36.8	215	60.5	33.8	207
28.0	23.3	193	34.4	25.2	204	44.4	32.7	250	52.7	29.7	217	55.5	34.7	242
68.6	42.9	235	44.7	38.5	214	61.4	41.1	188	70.9	43.9	184	73.7	37.9	168
31.5	21.6	169	38.3	26.5	183	44.9	24.6	182	53.8	28.9	192	53.4	27.5	187
46.5	23.0	139	41.1	28.8	174	40.1	21.4	151	50.8	20.8	147	54.3	26.4	184
47.3	44.0	254	66.1	58.1	288	84.9	73.0	263	90.6	78.7	283	97.3	62.4	244
35.6	31.6	176	32.2	23.3	165	35.3	23.2	174	43.2	22.8	135	48.0	22.1	130
37.9	25.5	122	30.7	25.0	121	35.9	22.7	109	37.9	22.5	107	42.6	24.2	105
46.4	30.8	157	41.3	34.5	171	41.8	30.9	148	45.0	26.0	142	47.1	31.4	159
43.9	36.3	127	39.1	32.9	146	39.7	28.2	137	41.6	24.9	129	43.4	29.4	137
44.4	29.3	155	38.9	29.7	195	40.6	30.4	165	39.6	30.6	171	40.9	31.2	164
44.5	30.3	160	41.8	33.5	179	44.8	29.5	162	43.6	29.4	162	47.2	30.9	155
41.1	26.6	136	40.1	27.3	136	40.9	25.8	126	41.2	26.2	111	42.8	28.1	125
35.1	24.3	133	30.8	34.1	157	20.3	47.1	215	18.6	30.1	135	40.0	19.5	102
41.0	25.9	154	37.7	28.1	166	36.2	25.6	148	36.6	24.7	139	39.4	30.9	140
37.1	19.7	119	34.9	23.2	144	35.9	22.7	138	35.8	20.9	125	34.8	27.5	142
41.8	28.1	202	40.5	28.7	196	40.1	27.9	189	40.0	30.1	191	41.5	29.3	187
39.4	20.9	117	34.8	23.0	122	33.1	22.3	114	33.7	18.6	93	34.3	19.1	89
45.4	27.8	158	42.6	33.5	196	44.5	31.6	172	46.0	29.2	168	48.9	31.3	163
40.0	23.6	160	36.6	25.4	169	37.6	25.6	165	38.3	25.9	157	40.6	34.6	170
31.2	17.2	117	27.6	16.9	110	27.5	21.9	95	22.0	23.8	105	32.5	14.8	77
40.8	25.9	150	38.2	28.7	168	39.6	28.3	160	41.0	26.8	152	43.9	28.6	153

TABLE No. 14.—CASES AND DEATHS OF TYPHUS FROM 1935-1945  
IN EGYPT WITH CASE FATALITY RATES PER

Governorate or Mudiria	1935		1936		1937		1938		1939		1940		1941	
	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.
Cairo ... ..	37	9	70	24	103	35	128	37	209	43	364	58	168	34
Alexandria ... ..	73	22	14	7	87	17	43	11	60	11	117	28	170	47
Frontier Districts ... ..	15	3	45	3	15	1	51	—	3	2	5	1	91	8
Port-Said ... ..	8	—	4	1	6	—	1	—	3	—	21	—	24	—
Suez... ..	1	1	2	—	4	—	—	—	4	—	2	1	4	2
Ismailia ... ..	—	—	—	—	2	—	—	—	—	—	2	—	—	—
Damietta ... ..	—	—	—	—	2	2	1	—	1	1	—	—	—	—
Kaliubia ... ..	26	2	37	5	38	8	124	15	260	44	15	4	250	43
Sharkia ... ..	160	46	125	25	44	20	86	19	200	41	74	21	688	135
Menoufia... ..	342	80	126	20	147	22	354	43	549	110	680	121	678	102
Gharbia ... ..	1,027	124	862	93	590	44	316	47	1,195	224	924	151	2,152	366
Dakahlia... ..	222	40	312	58	362	61	2,274	46	767	121	699	145	1,763	370
Behera ... ..	1,008	147	867	91	423	61	574	61	318	69	816	187	1,835	384
Giza ... ..	70	13	103	36	18	7	168	25	183	38	228	35	350	6
Beni-Suef ... ..	14	2	—	—	10	1	—	—	28	3	105	29	911	137
Fayoum ... ..	2	—	6	—	4	1	2	—	12	2	18	2	5	1
Minia ... ..	17	2	8	1	36	3	48	4	5	1	3	—	5	1
Assiut ... ..	23	7	34	4	38	1	54	5	49	18	74	—	171	35
Gerga ... ..	13	2	16	4	34	8	102	16	242	43	140	42	109	14
Qena ... ..	8	6	90	15	77	12	323	41	206	15	38	5	38	8
Aswan ... ..	85	20	36	2	43	7	162	35	3	2	91	17	2	1
TOTAL... ..	3,151	526	2,757	389	2,083	311	2,811	405	4,297	788	4,416	863	9,414	1751



DISTRIBUTED ACCORDING TO GOVERNORATES AND PROVINCES  
100,000 POPULATION IN 1941, 1942, 1943, 1944, and 1945

41		1942						1943						1944						1945					
Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000									
Cases	D.			Cases	D.			Cases	D.			Cases	D.			Cases	D.								
12	2	2,244	554	158	39	8,751	1912	610	133	1,758	418	121	28.7	1,254	284	84.8	19.2								
23	6	521	151	71	21	1,473	388	198	52	413	108	54.6	14.2	422	81	54.9	10.5								
77	7	113	18	95	15	225	3	188	2.5	63	1	52	0.9	5	5	45	4								
18	—	68	7	50	5	260	23	135	12	89	9	63.1	6.3	102	3	71	2								
7	4	91	28	165	51	1,148	256	2,083	465	99	42	176	74.4	15	2	26.4	3.5								
—	—	85	31	145	53	311	115	536	168	53	45	88.4	75.1	68	42	111	68.7								
—	—	—	6	13	13	14	11	31	24	5	1	10.7	2.1	17	10	35.7	21								
29	7	363	110	55	17	1,655	305	250	46	713	173	105.6	25.6	742	161	108.5	23.5								
58	11	1,477	274	123	23	3,785	697	311	57	3,209	538	260	43.5	2,830	469	225.7	37.4								
55	8	2,367	426	191	34	3,166	612	254	49	1,968	421	156	34.2	1,823	336	143.3	26.4								
102	12	4,978	870	232	41	4,400	1007	203	47	2,944	605	135	27.7	3,605	698	163.7	31.7								
134	28	4,069	708	307	53	3,004	575	225	43	724	220	53.7	16.3	1,569	252	115.4	18.5								
163	34	2,788	628	244	55	3,948	731	348	63	1,580	317	135	27.1	2,454	469	207.8	39.7								
47	8	1,481	296	195	39	3,680	689	451	90	1,163	229	150	29.4	390	108	49.5	13.7								
151	22	411	72	67	12	725	130	117	21	470	129	75.1	20.6	423	59	66.7	9.3								
8	2	8	1	1	0.1	22	6	3.3	0.9	9	7	1.3	1.0	15	6	2.2	0.9								
1	0.2	55	14	5	1	144	46	14	4.5	423	136	41.2	13.2	743	235	71.6	22.6								
13	3	356	76	27	6	700	191	53	14	1,311	255	98.2	19.1	544	129	40.3	9.5								
9	1	351	73	28	6	1,208	257	96	20	762	169	60.4	13.3	165	44	12.9	3.4								
3	0.7	165	54	15	5	1,118	256	100	23	281	90	24.9	7.9	583	106	51.1	9.2								
0.6	0.3	63	14	20	4	451	62	139	19	440	120	141	38.3	464	128	150.2	41.4								
55	10	22,054	4411	128	26	40,188	8272	230	47	18,477	4043	104.8	22.9	18,283	3627	192.6	20.35								

**TABLE No 15.—FOUR-WEEKLY DISTRIBUTION OF TYPHUS CASES**  
FROM 1935—1945

Weeks	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
1- 4 ...	143	185	109	60	76	186	416	1,236	2,094	965	1,243
5- 8 ...	585	388	195	182	334	531	855	2,331	3,293	2,163	1,949
9-12 ...	561	461	157	285	804	980	1,739	3,145	4,730	2,910	2,815
13-16 ...	694	592	259	491	876	966	1,898	4,469	7,383	3,002	3,959
17-20 ...	573	427	675	726	908	777	1,796	4,623	9,408	3,325	3,674
21-24 ...	270	350	385	506	631	407	1,211	2,689	6,123	2,524	2,272
25-28 ...	143	242	164	203	345	250	425	1,337	3,834	1,461	1,142
29-32 ...	53	41	63	103	133	102	234	527	1,758	561	499
33-36 ...	31	12	35	70	46	68	92	190	591	329	201
37-40 ...	17	9	8	19	16	26	20	142	221	165	106
41-44 ...	6	10	10	8	13	22	31	152	275	163	105
45-48 ...	24	15	10	9	11	29	235	291	114	180	99
49-52 ...	51	25	13	49	103	72	462	922	347	729	219
<b>TOTAL</b>	<b>3,151</b>	<b>2,757</b>	<b>2,083</b>	<b>2,811</b>	<b>4,296</b>	<b>4,416</b>	<b>9,414</b>	<b>22,054</b>	<b>40,171</b>	<b>18,477</b>	<b>18,283</b>



TABLE NO. 16.—CASES AND DEATHS OF TYPHUS, AND RATIO PER 1,000,000 POPULATION  
AND CASE-FATALITY-RATE PER CENT IN EGYPT FROM 1905—1945.

Year	No. of Cases	Rate per 1,000,000	No. of Deaths	Rate per 1,000,000	Case Fatality Rate %	Year	No. of Cases	Rate per 1,000,00	No. of Deaths	Rate per 1,000,000	Case Fatality Rate %
1905	2,478	226	1,111	101	44·8	1926	966	68	201	14	20·8
1906	1,668	150	938	84	56·2	1927	794	56	189	13	23·8
1907	1,063	94	836	74	78·6	1928	599	41·	138	9	23·0
1908	2,926	255	1,153	101	39·4	1929	1,141	78	214	15	18·8
1909	3,782	326	1,608	139	42·5	1930	288	19	74	5	25·7
1910	2,908	248	1,210	103	41·6	1931	265	18	57	4	21·5
1911	5,151	433	1,702	143	33·0	1932	2,298	153	399	26	17·5
1912	5,382	447	1,658	138	30·8	1933	7,865	515	1,332	87	16·9
1913	4,936	405	1,438	118	29·1	1934	7,536	488	1,418	92	18·8
1914	9,508	771	2,533	205	26·6	1935	3,151	202	526	34	16·7
1915	17,096	1,368	4,216	337	24·7	1936	2,757	174	389	25	14·1
1916	30,507	2,412	7,096	561	23·3	1937	2,083	130	311	19	14·9
1917	18,569	1,451	4,174	326	22·5	1938	2,811	173	405	25	14·4
1918	25,246	1,952	7,354	568	29·1	1939	4,296	260	788	48	18·3
1919	16,986	299	5,573	426	32·8	1940	4,416	263	863	51	19·5
1920	13,253	1,002	3,510	265	26·5	1941	9,414	558	1,751	104	18·6
1921	4,487	335	1,271	95	28·3	1942	22,054	1,289	4,411	258	20·0
1922	2,489	184	723	53	29·0	1943	40,188	2,304	8,252	473	20·5
1923	1,935	142	603	44	31·2	1944	18,477	1,049	4,043	229	21·8
1924	1,683	122	588	42	34·9	1945	18,283	10,26	3,627	203	19·8
1925	1,314	94	290	21	22·1						

TABLE No 17.—FOUR-WEEKLY INCIDENCE OF  
RELAPSING FEVER DURING 1945

Weeks	Cases
1 — 4 ... ..	33
5 — 8 ... ..	193
9 — 12 ... ..	702
13 — 16 ... ..	1,146
17 — 20 ... ..	1,748
21 — 24 ... ..	1,956
25 — 28 ... ..	2,013
29 — 32 ... ..	1,682
33 — 36 ... ..	1,150
37 — 40 ... ..	1,073
41 — 44 ... ..	1,293
45 — 48 ... ..	1,848
49 — 52 ... ..	3,289
TOTAL ... ..	18,126

TABLE No. 18.— CASES AND DEATHS OF INFECTIOUS DISEASES NOTIFIED THROUGHOUT  
EGYPT DURING THE LAST FOUR YEARS

Disease	1942			1943			1944			1945		
	Cases	Deaths	Rate per Cent	Cases	Deaths	Rate per Cent	Cases	Deaths	Rate per Cent	Cases	Deaths	Rate per Cent
Plague... ..	15	1	66·7	163	119	66·8	614	393	61·0	218	108	49·5
Typhus ... ..	22,054	4,411	20	40,188	8,272	20·5	18,477	4,043	21·8	8,223	3,627	19·8
Typhoid and Paratyphoid	6,814	1,257	18·4	4,431	790	17·8	5,019	790	15·7	5,286	833	15·7
Scarlet Fever ... ..	39	2	5·1	54	3	5·5	30	—	—	12	1	8·3
Cerebro-Spinal Fever	212	101	47·6	111	57	50·0	147	75	51·0	65	49	75·3
Diphtheria ... ..	3,950	1,832	47·6	4,143	1,595	38·4	3,326	1,261	38·0	3,130	1,159	37·0
Measles ... ..	9,764	3,654	37·4	4,219	1,022	24·0	7,274	2,475	34·0	5,444	1,413	25·9
Pulmonary T.B. ...	6,608	3,472	52·5	6,770	3,647	53·8	6,950	3,803	54·7	6,819	3,681	53·9
Other forms of T.B.	157	525	—	104	544	—	257	464	—	168	437	260
Chicken-pox ... ..	870	8	0·9	1,238	21	1·6	1,057	15	1·4	1,333	12	0·89
Puerperal Sepsis ..	331	20	62·7	375	187	49·8	357	159	44·2	387	178	45·9
Dysentery ... ..	3,553	577	16·2	1,873	604	32·2	1,672	537	32·1	1,217	384	31·5
Influenza ... ..	12,965	218	1·7	14,056	219	1·5	11,203	204	1·8	14,642	152	1·03
Anthrax ... ..	21	4	19·0	15	9	60·0	13	2	15·3	4	2	50·0
Encephalitis, Lethar.	6	5	83·3	4	3	75·0	1	1	100	2	2	100
Whooping Cough ...	2,257	142	6·3	2,054	105	5·1	1,208	105	8·6	1,856	92	4·9
Mumps ... ..	1,453	30	2·1	1,449	31	2·1	1,063	30	2·8	1,743	27	1·5
Undulant Fever ...	9	2	22·2	6	4	66·6	20	3	15·0	15	2	13·3
Leprosy ... ..	520	82	15·8	393	68	17·3	224	58	25·8	332	53	15·9
Rabies... ..	44	43	97·7	17	19	—	11	21	—	12	25	208
Tetanus ... ..	459	313	68·2	442	294	66·5	544	331	60·8	439	303	69·0
Acute Polio-Myelitis...	5	1	20·0	7	2	28·5	11	4	36·3	7	6	85·0
Dengue ... ..	—	—	—	2	—	—	1	—	—	—	1	—
Erysipelas ... ..	3,100	312	10·1	1,956	209	10·6	1,671	156	9·3	1,551	146	9·4
New Malaria ... ..	20,937	394	1·9	16,530	1,341	8·1	37,847	1,867	4·6	5,887	56	0·95
Recurrent Malaria ...	—	—	—	—	—	—	218,231	14	0·006	141,557	19	0·013
Jaundice ... ..	1	—	—	2	1	50·0	—	—	—	—	—	—
Small-pox ... ..	—	—	—	4,138	384	9·2	11,194	1,016	9·0	1,355	115	8·4
Relapsing Fever ...	—	—	—	—	—	—	10	—	—	18,126	881	4·8
Acute Pneumonia ...	6,215	5,296	58·2	6,935	5,762	83·0	6,929	5,242	75·6	5,805	4,848	83·5
Glanders ... ..	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	102,360	22,949	22·4	111,708	25,284	22·6	335,391	23,071	6·8	235,700	18,612	7·8



TABLE NO. 19 - CASES AND DEATHS OF INFECTIOUS DISEASES NOTIFIED

Governorate or Mudiria	Year	Small-Pox		Plague		Typhus		Typhoid		Cerebro-Spinal Meningitis		Diphtheria	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cairo ... ..	1944	2,285	129	—	—	1,758	418	2,753	371	91	30	1,416	40
	1945	115	9	—	—	1,254	24	2,846	383	33	25	1,812	42
Alexandria	1944	1,419	164	—	—	443	108	953	140	31	21	419	13
	1945	97	11	—	—	422	81	1,012	139	9	6	351	11
Ismailia ...	1944	180	15	409	243	5	45	35	9	—	—	11	
	1945	7	3	122	66	68	42	78	21	1	1	8	
Port-Said ...	1944	795	69	72	31	89	9	259	22	5	2	31	
	1945	3	1	74	31	102	3	346	24	7	4	27	
Damietta ...	1944	65	9	—	—	5	1	3	3	—	—	29	1
	1945	0	1	—	—	17	10	20	1	—	—	15	1
Suez ... ..	1944	217	31	163	113	99	42	75	22	1	1	43	2
	1945	2	—	22	11	15	2	46	8	1	1	22	
Frent. Dist.	1944	92	5	—	—	63	1	32	3	1	1	12	
	1945	6	2	—	—	55	5	37	3	—	—	9	
Behera ...	1944	290	30	—	—	1,580	317	79	14	3	2	163	7
	1945	291	27	—	—	2,454	469	82	26	—	—	109	7
Dakahlia ...	1944	846	76	—	—	72	220	23	9	1	—	151	8
	1945	152	19	—	—	1,539	252	43	10	—	1	134	8
Gharbia ...	1944	1,640	131	—	—	2,944	605	56	17	8	8	290	14
	1945	396	24	—	—	3,605	098	105	39	11	7	186	12
Meroufia ...	1944	466	33	—	—	1,968	431	52	8	1	—	122	6
	1945	53	4	—	—	1,823	376	59	14	—	—	76	3
Kaliubia ...	1944	456	30	—	—	712	173	71	18	—	—	117	5
	1945	19	1	—	—	749	161	41	9	—	—	81	5
Sharkia ...	1944	733	42	—	—	3,209	538	41	13	—	1	97	4
	1945	18	—	—	—	2,830	409	41	15	2	3	49	3
Aswan ...	1944	16	2	—	—	440	120	7	3	—	—	24	1
	1945	—	—	—	—	464	128	5	—	—	—	20	
Assiut ...	1944	192	42	—	2	1,311	255	164	31	—	1	74	3
	1945	6	1	—	—	544	129	210	42	—	—	45	2
Beni Suef ...	1944	94	12	—	—	470	129	63	14	—	—	26	1
	1945	25	—	—	—	423	59	7	1	—	—	14	
Fayoum ...	1944	270	34	—	—	9	7	28	14	2	3	49	2
	1945	53	2	—	—	15	6	5	2	—	—	15	1
Gerga... ..	1944	218	41	—	2	762	169	35	12	—	—	19	
	1945	—	—	—	—	165	44	48	13	—	—	6	
Giza ... ..	1944	431	33	—	—	1,103	229	200	42	2	1	138	70
	1945	36	7	—	—	390	103	182	61	1	1	99	84
Minia... ..	1944	397	55	—	—	423	136	62	15	1	1	63	37
	1945	69	3	—	—	743	235	40	13	—	—	28	17
Qena ... ..	1944	62	27	—	2	281	50	26	10	—	—	32	15
	1945	7	—	—	—	583	106	33	8	—	—	24	14
TOTAL ...	1944	11,194	116	644	393	18,477	4,043	5,019	790	147	75	3,326	1,264
	1945	1,355	115	218	108	18,283	3,627	5,286	833	65	49	3,130	1,159
Rate per Million	1944	635	57	36	22	1,049	229	284	44	8.3	4.2	188	71
	1945	76	6.4	12.2	6	1,026	203.5	296.6	46.7	3.6	2.7	175.6	68

THROUGHOUT EGYPT DURING 1944 AND 1945

Measles		T.B. of Lungs		Acute Pneumonia		Influenza		New Malaria		Recur. Malaria		Other Inf. Diseases		TOTAL	
C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
1,336	813	2,845	1,708	3,065	2,471	1,777	13	721	22	10	—	1,842	676	20,002	7,051
506	213	3,063	1,511	2,262	1,728	2,500	11	297	11	145	—	5,062	617	19,835	5,242
325	42	1,421	671	2,062	1,607	3,212	37	458	22	—	—	1,303	287	12,016	3,239
765	136	1,371	800	2,329	2,288	4,096	14	201	4	—	—	3,335	342	14,078	3,861
20	29	14	15	50	81	102	2	178	1	—	—	52	25	1,104	472
6	2	12	46	28	73	149	—	—	1	—	—	198	31	677	291
56	33	223	121	46	27	206	—	94	1	—	—	191	35	2,072	355
32	10	175	121	73	28	185	—	66	—	—	—	416	45	1,496	275
2	—	65	27	2	2	69	—	8	—	—	—	108	11	356	71
6	—	35	31	12	6	13	—	3	—	—	—	45	9	166	75
58	30	111	92	125	96	202	5	332	8	14	—	152	59	1,622	525
9	2	84	48	126	50	438	3	228	8	172	—	1,491	69	2,656	210
372	—	5	2	131	—	106	—	361	—	—	—	340	1	1,515	14
390	37	9	—	59	8	140	1	461	—	21	—	680	12	1,867	70
895	301	240	154	249	193	210	6	525	2	11	—	405	83	4,650	1,174
166	51	190	143	134	52	247	4	1,38	1	130	1	598	95	5,839	946
328	56	395	148	60	42	313	6	119	4	2	—	570	75	3,534	716
1,027	193	385	132	60	25	317	10	573	7	52	—	702	87	5,014	818
524	121	375	191	169	206	708	10	162	2	27	—	550	106	7,453	1,540
390	48	401	203	155	165	863	11	851	3	259	—	788	113	10,210	1,440
809	167	62	37	29	25	414	14	25	2	—	—	244	77	4,192	854
153	29	121	46	21	21	674	6	23	—	2	—	610	73	3,615	568
481	101	146	91	68	41	649	12	889	2	—	—	220	44	3,810	571
85	40	85	39	58	19	776	10	489	—	9	—	713	84	3,098	461
202	63	144	91	49	39	557	8	439	1	58	—	199	37	5,728	879
118	39	147	66	29	44	265	2	553	2	34	—	400	68	4,486	746
311	27	15	13	75	33	302	19	1,260	396	28,872	—	90	11	31,412	638
33	5	69	32	50	29	70	3	3	5	28,785	2	116	8	29,615	220
267	133	164	100	138	73	688	19	26,391	6	10,570	—	557	72	40,516	770
647	283	136	73	93	82	1,303	26	13	1	24,921	—	212	191	30,120	849
54	19	57	31	72	26	402	16	66	3	—	—	183	22	1,487	286
32	7	50	28	36	84	709	7	43	2	2	—	3,464	265	4,805	460
185	41	192	59	67	39	58	2	418	6	95	—	188	35	1,561	261
65	7	91	66	23	18	34	6	484	1	381	—	667	55	1,833	178
98	51	38	23	67	28	145	6	1,234	5	18,047	—	100	41	20,763	387
135	41	15	14	67	19	449	8	6	2	22,201	—	621	49	23,713	196
486	265	220	122	143	91	315	7	121	—	—	—	199	62	3,418	925
229	47	162	142	91	101	326	4	44	—	—	—	2,976	181	4,536	736
307	76	135	57	110	51	429	9	105	2	—	—	277	50	2,309	489
525	141	106	58	73	53	777	13	15	—	—	—	1,801	109	4,177	642
158	107	78	50	152	68	339	13	3,938	1,382	160,525	14	280	76	165,871	1,854
115	82	112	52	86	25	311	13	6	8	62,243	16	324	49	63,854	373
<b>7,274</b>	<b>2,475</b>	<b>6,819</b>	<b>3,803</b>	<b>6,929</b>	<b>5,242</b>	<b>11,203</b>	<b>204</b>	<b>37,847</b>	<b>1,867</b>	<b>218,231</b>	<b>14</b>	<b>8,150</b>	<b>1,885</b>	<b>335,391</b>	<b>23,071</b>
<b>5,444</b>	<b>1,413</b>	<b>6,950</b>	<b>3,681</b>	<b>5,805</b>	<b>4,848</b>	<b>14,642</b>	<b>152</b>	<b>5,887</b>	<b>56</b>	<b>141,557</b>	<b>19</b>	<b>27,209</b>	<b>2,552</b>	<b>235,700</b>	<b>18,612</b>
412	140	391	215	393	297	635	11	2,147	105	12,384	0,7	462	106	19,033	1,309
305.5	79.2	382.6	206.5	325	272	821.6	8.5	330	3.1	7,944	1.06	1,526	143	13,227	1,044



TABLE No. 20.—MEDICO LEGAL STATEMENT FOR 1945

Locality	Fatal Cases		Serious Cases		Slight Cases	
	Criminal	Accidental	Criminal	Accidental	Criminal	Accidental
Cairo ... ..	—	16	197	118	30,492	2,218
Alexandria ... ..	—	—	250	9,790	3,860	1,000
Canal ... ..	34	333	140	609	2,008	2,833
Suez... ..	147	116	29	32	2,041	257
Damietta ... ..	2	27	3	10	1,552	340
Frontier Districts ... ..	20	54	59	141	263	499
Behera ... ..	399	480	462	337	4,011	1,253
Sharkia ... ..	4	7	27	30	102	110
Dakahlia ... ..	334	393	846	407	4,348	1,465
Gharbia ... ..	311	352	421	334	8,422	2,876
Kaliubia ... ..	101	214	359	141	1,288	582
Menoufia ... ..	64	161	216	112	2,041	1,300
Assiut ... ..	454	328	1,009	262	2,968	933
Aswan ... ..	11	28	10	5	340	252
Beni-Suef ... ..	49	120	178	179	2,618	532
Fayoum ... ..	70	89	158	160	1,062	375
Gerga ... ..	168	314	310	170	2,915	844
Giza ... ..	83	114	105	72	1,376	677
Qena ... ..	67	209	261	140	3,016	575
Minia ... ..	326	300	211	312	2,822	1,368
<b>TOTAL ... ..</b>	<b>2,644</b>	<b>3,655</b>	<b>5,251</b>	<b>13,361</b>	<b>77,545</b>	<b>20,289</b>



## Chapter III.—INDUSTRIAL HYGIENE

### UNHEALTHY, INCONVENIENT AND DANGEROUS ESTABLISHMENTS.

#### I.—Applications for New Permits.

The number of applications for new permits for unhealthy establishments of Class I during the year 1945 was 230, as compared with 250 in 1944. (Applications for new permits for establishments in Dakahlia, Gharbia, Behera, Menoufia and Damietta Governorate are excluded). These are dealt with by the Labour Department.

#### II.—Licensed Establishments actually working :

The total number of unhealthy establishments of the three classes licensed and actually working in Provinces and Governorates (excluding establishments in Alexandria) was 85,449 in 1945.

#### III.—Ministerial Arrêtés.

In accordance with the opinion given by the Contentieux regarding the issue of Ministerial Arrêtés for improvement of the sanitary conditions of licensed establishments, three Ministerial Arrêtés were issued during the year 1945 as compared with three in 1944.

TABLE NO. 21.—UNHEALTHY ESTABLISHMENTS  
ACTUALLY LICENSED DURING 1945

Locality	Total Establishments of the 3 Schedules Actually Licensed
Cairo ... ..	19,664
Damietta ... ..	1,966
Canal ... ..	1,99
Suez... ..	1,039
Kaliubia ... ..	3,923
Menoufia... ..	5,601
Sharkia ... ..	9,305
Gharbia ... ..	6,834
Dakahlia ... ..	4,717
Behera ... ..	3,828
Giza ... ..	4,152
Fayoum ... ..	3,010
Beni Suef ... ..	2,250
Minia ... ..	4,721
Assiut ... ..	5,040
Gerga ... ..	3,115
Qena ... ..	2,789
Aswan ... ..	1,505
TOTAL ... ..	85,449

# Chapter IV.—FOOD CONTROL

TABLE No. 22.—Statistical List showing QUANTITIES OF FOODSTUFFS CONDEMNED, NUMBER OF SAMPLES TAKEN AND RESULTS OF THEIR ANALYSIS DURING 1945

Name of Article	Foodstuffs Condemned					Samples taken					Percentage	
	Number	Bottles	Cans	Pounds	Okes	Number of Samples	Genuine	Adulterated	Unfit	Not analysed	Adulteration	Unfitness
1.— <i>Fresh Foods</i> :—												
Fruits and Vegetables...	53,083	—	89	20,173	45,775	—	—	—	—	—	—	—
Fish ... ..	64	—	—	1,111	3,577	—	—	—	—	—	—	—
Meat ... ..	2	—	—	1,043	328	—	—	—	—	—	—	—
Other Fresh Foods ...	4,862	126	14	52	1,102	—	—	—	—	—	—	—
2.— <i>Cooked Foods</i> ... ..	12,425	3	607	15	—	—	—	—	—	—	—	—
3.— <i>Canned Foods</i> :—												
Jams ... ..	7,929	14	359	1,251	70	—	—	—	—	—	—	—
Milk and its Products...	73	—	5	43	103	—	—	—	—	—	—	—
Fruits and Vegetables...	1,059	2,417	635	240	1,313	—	—	—	—	—	—	—
Meat ... ..	—	—	135	270	27	1	1	—	—	—	—	—
Fish ... ..	299	—	489	929	511	—	—	—	—	—	—	—
Other Canned Foods ...	200	2	3	111	481	—	—	—	—	—	—	—
4.— <i>Oils</i> :—												
Olive Oil...	—	—	—	201	88	86	62	16	8	—	19	9.5
Sesame Oil ... ..	—	—	—	15	2	813	774	21	18	—	2.5	2
Linseed Oil ... ..	—	—	—	57	2	472	408	12	52	—	2.5	11
Lettuce Oil ... ..	—	—	—	—	—	17	16	—	1	—	—	5.5
Safflower Oil ... ..	—	—	—	—	13	17	10	—	1	—	—	—
Cotton-Seed Oil ... ..	—	—	—	216	104	167	162	5	—	—	3	—
Other Oils ... ..	—	—	—	21	—	92	68	22	—	—	23	2





STATISTICS SHOWING WORK DONE BY FOOD CONTROL GANGS IN CUSTOMS HOUSES DURING 1945

TABLE No. 23.—*Consignments Examined and Results of Samples taken therefrom.*

No. of Consignments Examined	No. of Samples taken	Results		
		Genuine	Unfit	Adulterated
10,285	430	252	101	77

TABLE No. 24.—*Foodstuffs Condemned or Refused entry into the Country*

Kind of Foods	Kilos	Cans or Bottles	Boxes	Sacks
1.— <i>Fresh Foods</i> :—				
Vegetables ... ..	44,720	—	—	—
Fruits ... ..	411,261	—	—	—
Meat ... ..	49·5	—	—	—
2.— <i>Canned Foods</i> :—				
Jams and Dried Fruits ... ..	17,533	1,435	1,313	—
Milk and its Products... ..	76	4,627	524	—
Meat ... ..	205	124	3	—
Fish ... ..	2,335	85,960	42	—
Vegetables and sauce ... ..	1,082	425	25	—
3.— <i>Oils</i> :—				
Olive oil ... ..	802	18	—	—
Peanut oil ... ..	—	—	—	—
4.— <i>Different Foods</i> :—				
Flour ... ..	9,498	—	—	—
Flour Products ... ..	4,423	—	937	10,965
Sweets and chocolate ... ..	999	78	—	—
Butter ... ..	39	—	—	—
Masli ... ..	1,207	34	—	—
Margarine and Fat ... ..	—	—	—	—
Tea ... ..	19,444	—	—	—
Coffee ... ..	194,891	—	—	634
Wine ... ..	244	—	—	—
Beer ... ..	—	984	—	—
Seeds and Corn ... ..	25,186	—	1,230	—
Nuts and Almonds ... ..	—	—	—	—
Spices ... ..	8,425	—	—	83
5.— <i>Other Foods</i> ... ..	28,620	—	1,087	—
<b>TOTAL ... ..</b>	<b>771,043·5</b>	<b>93,685</b>	<b>5,171</b>	<b>11,682</b>

TABLE No. 25 —NUMBER OF SAMPLES OF MILK TAKEN DURING 1945  
AND RESULT OF THEIR ANALYSIS.

No. of Samples	Result of Analysis			
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by both
11,085	9,991	340	340	166

TABLE No. 26.—VARIOUS STATISTICS 1945

P.V. drawn up under article II of Law No. 41 of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Bandars to which the itinerant vendors regulations was applied	Bandars to which the milk vendors regulations was applied	No. of itinerant vendors licensed during 1944	No. of milk vendors licensed during 1944
1,514	9,889	2,638	12	3	1,291	135

## Part II.—SOCIAL HYGIENE

### Chapter V.—MATERNITY AND CHILD WELFARE

In combating maternal and infantile mortality, the Ministry directed its activities towards health education of the population, raising the standard of living, improvement of dwelling houses, helping mothers with excess of children, increasing number of midwives and control of infectious and congenital diseases. To this may be added the teaching of proper methods of child nursing and stamping out superstitions.

As a further step for achieving this end, all standing orders and regulations were compiled in booklet form which deal with :—

- (1) Maternity and child welfare regulations.
- (2) Duties of staff of welfare centres.
- (3) Administrative orders.

This book later proved of value as a text book for other departments of the Ministry, e.g. Rural hygiene units.

Two new maternity and child welfare centres were opened during the year, one in Tahta (Upper Egypt) and another in Rosetta (Lower Egypt).

Child Welfare centres now contribute condensed milk and clothes to poor mothers and children to help alleviate the high infantile mortality. Seven kilogrammes of fresh milk are daily distributed by each centre to weak mothers and infants. A marked improvement has since been observed in the weight and general health of infants. It is hoped that this amount will be increased to twice or three times its quantity in the near future. Gauze also was distributed to mothers for the protection of the eyes of their infants from flies.

The site and cleanliness of the bed-room where confinement will take place is always impressed upon pregnant.

Advantage is taken of the events of commemorating H.M. the King's accession to the throne and also H.R.H. Princess Ferial's Birthday for the distribution of clothes, soap, fruits, etc, to destitute mothers and children.

Whenever necessary, children are vaccinated against small-pox and immunized against diphtheria by the centres.

Rickets is treated with various methods including ultra violet rays.

In-patient admissions within child welfare centres are becoming popular amongst the population and it is proposed to increase the accommodation to 10 beds in each centre. This had already been effected in Abbassia Child Welfare Centre.

The following statistics demonstrate the activities of the various centres during the year.



TABLE No. 27

Cases	1945
No. of New Pregnants ... ..	115,107
„ Old Pregnants ... ..	451,580
„ Blood specimens taken for Wassermann examination	27,900
„ Positive for Wassermann Reaction ... ..	2,210
„ Children attending Centres ... ..	1,524,893
„ In ants vaccine against small-pox ... ..	31,312
„ „ immunized against diptheria ... ..	24,825
„ Confinements undertaken by midwives ... ..	15,064
„ „ „ „ assistant midwives ... ..	78,468
„ „ „ „ medical officers ... ..	355
„ „ „ „ from outside (not registered) ... ..	5,751
„ Total confinements ... ..	93,887
„ Expectant mothers removed to hospitals ... ..	1,833
„ Still-births at full term ... ..	996
„ Still-births within first 3 months of pregnancy ... ..	108
„ „ „ premature in ant over 6 months ... ..	284
„ Maternal mortality due to childbirth ... ..	77
„ Infantile mortality within first month of life ... ..	957
„ Medical officers' visits to sick puerperals ... ..	1,741
„ Midwives visits to pregnant during 9th month ... ..	49,331
„ „ „ „ puerperal mothers ... ..	373,709
„ Other visits ... ..	27,408
„ Visits to pregnant at home ... ..	27,279
„ „ „ infants at home ... ..	67,241
„ Cases of Eclampsia ... ..	187
„ Laceration of perineum ... ..	688
„ Cases of Plecenta previa ... ..	62
„ Urine samples ... ..	428,924
„ Post Parturition Albuminuria ... ..	5,692
„ Diabetes before delivery ... ..	77
„ Lectures delivered by medical officers ... ..	4,518
„ „ „ „ midwives ... ..	8,289
„ „ „ „ health visitors on nutrition ... ..	7,689
Food contributions to mother and baby ... ..	181,489
Ready-made clothes contributed to mother and baby ... ..	1,025
Cloth, per metre, contributed to mother and baby ... ..	6,423

### FOUNDLINGS HOMES

The following is a statement of Cairo Foundlings Home during the year 1945 :—

Children admitted during the year 1945 ... ..	355
remaining from previous year ... ..	469
deaths during the year ... ..	137
discharges : adopted ... ..	62
repatriated ... ..	75
removed to other homes ... ..	21
remaining on December 31, 1945 ... ..	633
in wards ... ..	100
with wet nurses ... ..	438



## Chapter VI.—CHEST DISEASES

### *Statistical Data.*

Since the campaign against Tuberculosis was first launched in Egypt in 1929 until the end of 1944, a total of 54,624 positive T.B. cases were recorded. A further 7,050 cases were detected during the year 1945, making a total of 61,674 cases at the end of 1945.

During the year, the following units were opened :—

(1) Aswan Chest Diseases Dispensary on February 18, 1945.

(2) In-patient Section at Aswan Dispensary with an accommodation of 20 beds on October 27, 1945.

(3) In-patient Section at Minia Dispensary with an accommodation of 20 beds on October 27, 1945.

The Chest Diseases Units are thus as follows :—

17 Dispensaries.

4 Branches of Main Dispensaries.

10 In-patient Sections within Dispensaries.

3 Sanatoria.

2 Institutions for Surgical T.B.

4 Preventoria.

1 Colony for Convalescents.

The following are the occupations of T.B. patients detected during the year 1945—

468 tradesmen : consisting of 122 foodstuff vendors, 35 poultry and cattle merchants, 162 grocers, 49 fruiterers, 160 other trades.

521 employees : including 238 civil servants, 115 commercial employees, 75 teachers 93 other employments.

2,099 craftsmen : consisting of 97 cooks, 84 waiters, 115 barmen, 43 domestic servants 71 servants (farrashes), 26 gate-keepers, 65 barbers, 62 laundrymen, 90 drivers, 107 tailors, 100 shoemakers, 107 carpenters, 50 painters, 99 building workmen, 148 employees in firms, 164 weavers, 176 mechanics, 61 printers and 444 other occupations.

1,290 farmers.

213 pupils.

2,469 unemployed : including 1,794 invalids, 319 children, 356 unemployed.

Of 117,187 new patients examined during the year, 7,050 were found positive for Tuberculosis. Of these, 1,330 were children, and the remaining 5,720 were adults.

Of 7,576 contacts (3,303 children and 4,273 adults) examined, 253 developed Tuberculosis.

Health Visitors paid 23,028 visits this year and the Medical Officers 6,191 visits to tuberculous patients.

Appended to this report are detailed statistical data of the work carried out by the various dispensaries and other institutions.

*Therapeutic and Social Activities.*

Treatment and Social activities proceeded according to original plans referred to in previous reports. During this year, however, the following procedure has been adopted:—

1.—By Ministerial Arrêté, treatment fees in Sanatoria and T.B. Hospitals now apply to surgical tuberculosis units as well. Under a new provision, young patients undergoing treatment in 1st and 2nd classes in these Sanatoria may, subject to the approval of the Minister of Public Health, be accompanied by persons who should pay a daily fees of 400 mms.

The arrangement hitherto in force, by which patients under five years of age, in the 1st, 2nd and special 3rd classes were allowed to be accompanied by persons free of charge is now abolished. A specially equipped ward with every facility for the treatment of children has been provided in the Abbassia Chest Diseases Hospital, thus rendering the presence of accompanying persons unnecessary.

2.—In memory of the escape of H.M. the King from the motor accident near Kassasseen Village in 1943, the Council of Ministers, in its sitting of November 7, 1945, contributed, among other donations, the sum of L.E. 1,000 for the welfare of patients in Chest Diseases Hospitals. This sum was distributed among destitute T.B. patients at the dispensaries in the form of meat and cloth grants.

3.—As the fund provided in the Budget for the aid of destitute T.B. patients proved insufficient for the purpose, having been exhausted early in the year, a proposal was submitted to raise it to L.E. 20,000 per annum. In its sitting of March 10, 1945, the Council of Ministers approved a further L.E. 5,000 which were expended by the end of the year.

A total of 1,031 families benefitted by funds provided in the Budget or granted by Provincial and Municipal Councils.

4.—Considering that the spread of tuberculosis is greatest during wars and crucial periods when people undergo severe privations in food and disorganisation of living conditions, the efforts for the control of this disease were naturally increased of late. About half a million pounds were provided in this year's budget for the construction of Institutions for the treatment of Tuberculosis. The Public, on the other hand, contributed in this campaign. A wide movement is observed amongst wealthy citizens who have contributed to these schemes. Complete Chest Diseases units are in course of construction in Damietta, Zagazig, Alexandria, Belbeis, Mellawi, Damanhour and Suez. Each of these units is designed to comprise an Out-patient dispensary, a Sanatorium and an isolation section for advanced cases. So far, a sum of L.E. 150,000 has been contributed. This is besides the chest diseases hospital contributed by the Misr Company for Spinning and Weaving at Mehalla el Kobra and which cost about L.E. 200,000. Another Sanatorium is also in course of construction at Port-Said and the Kassasseen Polyclinic is being converted into a Sanatorium.

It is anticipated that there will be a total accommodation of 3,015 beds in all Chest Diseases units, as shown herebelow:—

290 beds in In-patient departments in Dispensaries.
1,150 beds in Sanatoria.
200 beds in Sanatoria for Bone Tuberculosis.
240 beds in Preventoria.
1,135 beds in New Constructions.
<u>3,015</u> Total.

5.—The Women Health Improvement Association of Cairo, organised a "Tuberculosis Week" in conjunction with the Society for the Control of Tuberculosis. Every means was adopted to make this week a success. The total yield amounted to L.E. 45,000, all of which was assigned for the care of T.B. patients and their families.



TABLE No. 28.—SHOWS THE DIFFERENT FORMS OF TREATMENT FOLLOWED IN THE DISPENSARIES  
AND THE RESULTS THEREOF,

DOMICILIARY TREATMENT					ARTIFICIAL PNEUMOTHORAX						
				Number					Number		
CONDITION ON 1ST EXAMINATION IN DISPENSARY	Tuberculous patients ... ..			8,118	No. of patients treated with A.P. 2,180						
	Sputum	Positive ... ..	5,631	No. of 1st Inductions ... ..					590		
		Negative ... ..	2,437	No. of Refills ... ..					25,169		
	Lesion	Unilateral ... ..	4,660	CONDITION BEFORE TREATMENT	Sputum	Positive... ..	1,758				
		Bilateral ... ..	3,458			Negative ... ..	422				
		Cavitary ... ..	3,416		Lesion	Unilateral ... ..	1,682				
	La t Spt - tum. Ex.	Positive... ..	4,064			Bilateral ... ..	498				
		Negative ... ..	4,054			Cavitary ... ..	1,143				
	Increase of weight ... ..			2,535	Haemoptysis ... ..					333	
	Decrease of weight... ..			2,357	Unilateral A.P. ... ..					1,873	
Stati nary... ..			2,113	Bilateral A.P. ... ..					190		
RESULT OF TREATMENT	Died ... ..			1,113	Extrapleural A.P. ... ..					4	
	Unable to work ... ..			2,637	STOPPED A.P. & CAUSE	Continued refills ... ..					1,713
	Walking ... ..			1,781		Adhesions ... ..					182
	Light work ... ..			1,955		Bilateralisation ... ..					182
	Full work... ..			432		Effusion ... ..					161
	Sputum still positive ... ..					925					
	Sputum still negative ... ..					454					
Sputum returned negative ... ..						672					
Sputum returned positive... ..						129					
Increase of weight ... ..						1,229					
Decrease of weight ... ..						426					
Stationary ... ..					364						
Died ... ..					161						
Incapable of work ... ..					551						
Walking ... ..					591						
Light work ... ..					659						
Full work ... ..					218						



TABLE NO. 29.--STATISTICS OF PATIENTS IN SANATORIA AND IN-SECTIONS OF DISPENSARIES  
(MANSOURA, ZAGAZIG, DAMIETTA, DAMANHOUR, TANTA, PORT SAID, ASSIUT,  
FAYOUM, MINIA AND ASWAN) IN 1945

										Sanatoria			In-patient	
										Helwan	Abbassia	Giza	Sections in Dispen- saries	
No. of patients discharged ... ..										1,336	804	440	654	
BEFORE ADMISSION	Sputum	Positive ... ..							828	625	333	424		
		Negative ... ..							508	179	107	230		
	Lesion	Unilateral ... ..							513	293	376	453		
		Bilateral ... ..							823	511	64	201		
	Temperature	Cavitary ... ..							518	419	189	334		
		Normal ... ..							858	412	375	281		
		Abnormal ... ..							478	392	65	373		
		General treatment ... ..							543	310	229	406		
	Exercise ... ..										493	494	345	179
	TREATMENT GIVEN	Gold therapy	No. of patients ... ..							24	29	—	113	
No. of injections ... ..									267	303	—	30		
A. P.		Inductions ... ..							302	403	140	378		
		Refills ... ..							9,093	8,080	1,962	6,122		
Extrapleural A.P. ... ..										—	—	—	—	
Phrenic Crush ... ..										193	146	37	8	
Pleurotomy... ..										506	10	—	1	
Aspiration ... ..										79	172	12	73	
Thoracoplasty ... ..										—	37	40	—	
Adhesion Section ... ..										189	191	34	23	
CAUSES OF DISCHARGE	Complications ... ..										821	35	11	76
	No. of other injections given ... ..										2,189	6,536	419	804
	Pts. went on leave and did not return ... ..										71	10	25	12
	At their own request	Pts. refused treatment ... ..							469	381	152	42		
		Pts. having special difficulties ... ..							148	32	21	200		
	Consent of Physician ... ..										516	381	242	450
	Weight	Increase of weight ... ..							960	493	235	451		
		Decrease of weight ... ..							269	189	83	119		
		Stationary ... ..							107	122	122	84		
	Temperature	Normal ... ..							953	493	405	496		
Abnormal ... ..								383	311	35	158			
CONDITION ON DISCHARGE	Sputum	Still positive ... ..							611	233	270	367		
		Still negative ... ..							466	165	90	116		
		Became negative ... ..							217	392	77	143		
		Became positive ... ..							42	14	3	28		
	Successful A.P. continued ... ..										493	311	128	424
	A.P. failed ... ..										91	47	12	95
	Condition improved ... ..										841	503	281	455
	Condition worse ... ..										168	89	39	75
	Condition stationary ... ..										195	152	99	103
	Died ... ..										132	60	21	21
Ability to Work	Working	Fully ... ..							19	57	8	76		
		Partially ... ..							68	329	226	287		
	Incapable ... ..								499	358	185	270		
Average duration of stay in days ... ..										133	193	101	751	
Patients stayed 6 months or more ... ..										522	351	77	132	
Patients stayed less than 6 months ... ..										814	453	363	522	

TABLE No. 30.—NUMBER OF T.B. POSITIVE CASES NOTIFIED BY THE DISPENSARIES DURING THE YEAR 1945 ACCORDING TO RESIDENCE

Unit	Cairo	Alexandria	Damietta	Port-Said	Canal, Suez and Ismailia	Behera	Gharbia	Menoufia	Dakahlia	Sharbia	Kalubia	Giza	Beni-Suef	Fayoum	Minia	Assiut	Gerga	Qena	Aswan	Oases	Total
Boulac	783	7	4	3	5	1	8	19	5	6	47	24	—	—	—	—	—	3	2	—	917
Mobtadayan	607	5	—	—	15	—	21	14	9	10	22	171	2	—	—	—	—	1	5	—	890
Khalifa	471	—	12	—	9	—	37	21	58	24	—	22	2	—	—	—	—	6	—	—	672
Mansoura	—	—	—	—	2	—	125	—	424	6	—	—	—	—	—	—	—	—	—	—	557
Tanta	—	—	—	—	—	4	292	30	6	—	—	—	—	—	—	—	—	—	—	—	332
Damanhour	—	3	—	—	—	297	72	—	—	—	—	—	—	—	—	—	—	—	—	—	372
Zagazig	—	—	—	—	—	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	352
Mehalla el Kobra	—	—	—	—	17	—	327	2	52	274	5	—	—	—	—	—	—	—	—	—	351
Alexandria	—	702	—	—	—	48	10	—	—	—	—	—	—	—	—	—	—	—	—	—	760
Port Said	1	—	—	254	27	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—	286
Damietta	—	—	239	—	3	—	41	—	157	—	11	—	—	—	—	—	—	—	—	—	440
Shebin el Kom	—	—	—	—	—	—	—	186	—	—	—	—	—	180	—	—	—	—	—	—	197
Fayoum	—	—	—	—	—	—	—	—	—	—	—	—	60	—	—	—	18	6	—	—	240
Assiut	1	—	—	—	—	—	—	1	—	—	—	—	—	—	10	168	—	—	—	1	205
Minia	—	—	—	—	—	—	—	—	—	—	—	—	1	—	212	12	—	—	—	—	225
Qena	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	123	6	—	129
Aswan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	125	—	125
TOTAL ...	1,863	717	255	257	78	351	935	275	734	321	85	217	65	182	223	194	19	139	139	1	7,050

TABLE NO. 31.— AGE DISTRIBUTION OF DEATHS RECORDED IN CHEST DISEASES DISPENSARIES  
DURING THE YEAR 1945

Dispensary	1-5 Years	5-15 Years	15-25 Years	25-35 Years	35-45 Years	Over 45 Years	Total
Boulac ... ..	7	26	65	58	42	18	216
Mobtadayan ... ..	4	7	69	63	35	15	193
Khalifa ... ..	7	25	97	70	30	50	279
Tanta ... ..	3	4	12	17	10	4	50
Mansoura ... ..	2	16	39	21	10	8	96
Shebin el Kom ... ..	—	—	3	5	3	—	11
Mahalla el Kobra ... ..	—	7	7	24	9	11	58
Zagazig ... ..	—	3	8	10	12	4	27
Damanhour ... ..	—	2	17	7	1	1	28
Alexandria ... ..	4	6	40	26	13	10	99
Port Said ... ..	4	21	36	19	13	7	100
Damietta ... ..	1	6	30	20	23	7	80
Fayoum ... ..	1	2	18	32	14	6	73
Assiut ... ..	5	3	9	9	6	2	34
Minia ... ..	1	1	17	8	4	1	32
Qena ... ..	—	1	3	10	2	3	19
Aswan ... ..	1	3	11	14	5	6	40
<b>TOTAL ... ..</b>	<b>40</b>	<b>133</b>	<b>481</b>	<b>413</b>	<b>232</b>	<b>153</b>	<b>1,452</b>



TABLE No. 32.—NUMBER OF CHEST DISEASES UNITS  
SINCE 1929

Year	Chest Diseases Dispensaries		In-Patient Sections	Sanatoria	T.B. Bone Sanatoria	Preventoria	Settlements
		Branches					
1929 ... ..	2	—	—	—	—	—	—
1930 ... ..	3	—	—	—	—	—	—
1931 ... ..	3	—	—	—	—	—	—
1932 ... ..	3	—	—	—	—	—	—
1933 ... ..	4	—	—	—	—	—	—
1934 ... ..	4	—	—	1 <sup>(1)</sup>	—	—	—
1935 ... ..	5	—	—	1	—	—	—
1936 ... ..	6	—	—	1	1 <sup>(2)</sup>	—	—
1937 ... ..	8	—	—	1	1	—	—
1938 ... ..	12	—	2	2	1	1	—
1939 ... ..	13	—	2	2	1	1	—
1940 ... ..	14	—	4	2	1	4	—
1941 ... ..	14	1	4	2	1	4	—
1942 ... ..	15	3	6	2	2	4	—
1943 ... ..	15	3	6	2	2	4	1
1944 ... ..	16	4	8	3	2	4	1
1945 ... ..	17	4	10	3	2	4	1

N.B.—<sup>(1)</sup> Fouad Sanatorium, Helwan, was attached to this Section in September 1934 .

<sup>(2)</sup> Maritime Sanatorium, Alexandria, was attached to this Section in September 1936.

TABLE NO. 33.—ANNUAL RETURN OF SANATORIA AND CHEST DISEASE

(New T.B. Cases in the Dispensary) or (New Patients admitted)																										
New Cases seeking Treatment (Dispensary)	T.B. Cases				Other Chest Diseases	Age Groups																Professions				
	Total	Sputum+	X-Ray+	From 1-9 Years		From 10-19 Years	From 20-29 Years	From 30-39 Years	From 40-49 Years	From 50-59 Years	Over 60 Years		Vendors	Officials	Workmen	Peasants	Students									
											M.	F.						M.	F.	M.	F.	M.	F.	M.	F.	
10,407	917	590	327	8978	19	11	96	66	245	112	161	70	60	32	24	9	10	2	30	58	405	67	26	1	1	
9,092	890	520	370	8202	32	34	68	47	200	91	158	97	81	32	32	9	5	1	56	82	291	82	16	1	1	
8,051	672	495	177	1397	21	12	64	37	202	73	96	53	57	20	28	5	3	1	99	70	213	65	49	1	1	
5,092	372	315	57	4720	3	1	26	14	104	35	81	31	39	10	15	5	6	—	20	19	58	171	3	1	1	
8,853	760	527	233	8093	23	22	88	46	208	62	129	60	68	23	20	4	4	3	80	80	311	52	16	2	2	
9,858	332	234	98	9526	9	1	15	18	82	38	58	31	36	22	13	5	4	—	16	31	71	78	8	1	1	
9,019	557	363	194	8462	7	4	56	35	157	73	103	42	50	14	11	1	3	1	24	39	127	171	12	1	1	
6,748	197	134	63	6551	1	1	21	6	60	28	32	22	16	4	3	3	—	—	2	11	45	62	6	1	1	
9,219	351	243	103	8868	8	8	40	36	62	37	64	38	23	9	10	6	7	3	18	32	109	48	16	1	1	
9,675	352	271	81	9323	7	4	21	14	101	25	59	35	32	26	12	4	10	2	23	3	85	111	9	1	1	
7,589	440	320	120	7149	11	9	42	31	118	63	62	37	32	11	10	4	9	1	26	10	116	114	2	1	1	
5,303	286	203	83	5017	5	4	20	33	74	32	47	29	17	11	8	2	1	1	31	22	99	5	6	1	1	
5,890	240	215	25	5225	2	—	16	7	35	16	74	35	26	9	12	5	3	—	11	13	31	96	4	1	1	
3,668	225	127	98	2443	3	3	18	10	32	15	57	36	18	13	10	4	3	3	12	13	46	53	4	1	1	
3,821	205	156	49	3616	3	5	11	15	38	28	28	21	17	16	6	11	5	1	6	21	30	51	10	1	1	
2,666	129	101	28	2537	—	—	7	5	30	6	43	12	10	1	9	4	2	—	4	11	21	53	8	1	1	
2,236	125	85	40	2111	1	3	13	11	31	5	16	10	11	11	6	1	4	2	10	6	35	11	8	1	1	
TOTAL	117187	7050	4904	2146	103218	155	122	622	341	1781	739	1270	659	596	264	229	82	79	21	468	521	2099	1290	203	24	
682	14	10	4	668	—	—	—	—	5	2	2	1	3	1	—	—	—	—	—	—	5	4	1	1	1	
813	11	8	3	802	—	—	2	—	4	3	1	—	1	—	—	—	—	—	—	1	3	4	0	1	1	
585	11	10	1	574	—	—	—	1	1	—	5	2	2	—	—	—	—	—	1	—	—	6	0	1	1	
1,252	49	37	12	1204	—	—	3	1	12	4	18	3	4	—	3	1	—	—	2	4	11	18	1	1	1	
1,347	1347	995	352	—	6	3	190	81	505	158	187	83	73	22	27	7	3	2	86	191	446	147	103	3	3	
804	769	625	144	35	17	15	88	96	231	122	113	55	32	16	8	8	3	0	30	85	254	51	49	3	3	
473	440	333	107	33	—	—	34	—	237	—	118	—	59	—	21	—	4	—	41	54	273	101	1	1	1	
TOTAL	2,624	2556	1953	603	68	23	18	312	177	973	280	418	138	167	38	56	15	10	2	157	330	973	299	153	7	

	Exam of (Sanat)				Old Cases (Disp.)					Visits (Disp.)		Discharged Patients											Ability to Work		
	Teeth	Nose	Throat	Ears	Total	T.B. Cases]	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse	Died	Complete	Partial	Unable				
													Pos.	Neg.											
294					8,015	47	990	685	1,588	2,330	334	404	193	211	248	53	62	41	1	282					
					8,175	613	686	780	577	2,244	429	354	182	172	206	57	51	40	7	199					
					6,348	402	1,196	994	150	1,097	257	329	171	158	149	70	86	24	40	148					
					5,171	2,175	159	144	2,663	1,139	495	92	55	37	70	12	9	1	—	67					
					18,283	1,321	376	362	659	1,719	362	229	93	136	151	39	25	14	11	104					
					8,156	3,679	638	474	336	1,441	361	124	54	63	72	36	10	6	8	42					
					2,036	1,705	94	70	167	1,699	435	223	136	87	140	44	24	15	7	67					
					4,213	3,089	624	483	514	1,218	540	40	10	30	27	2	10	1	—	29					
					7,200	3,309	575	458	328	1,402	381	73	38	31	26	30	9	8	0	38					
					12,050	6,663	1,191	814	338	1,409	240	112	58	54	64	27	10	1	1	45					
					8,230	5,388	394	225	222	1,227	332	216	151	65	177	21	11	7	—	55					
					14,214	2,884	415	428	10,487	890	378	76	38	38	46	20	1	9	28	18					
					6,334	2,552	580	590	2,611	1,893	359	41	21	20	29	8	4	0	17	25					
					8,412	3,501	1,144	652	3,115	1,488	426	48	26	22	15	22	10	1	—	23					
					2,516	2,010	172	79	257	1,379	364	101	62	39	39	28	28	6	3	50					
					2,021	836	68	37	1,095	443	255	17	7	10	7	3	5	2	1	7					
					2,392	446	149	72	1,729	510	243	14	8	6	5	2	5	2	0	6					
TOTAL					123760	66441	12,648	7,232	37,439	23,028	6,191	2,493	1,306	1179	1,471	434	360	178	108	1,205	1				
					53	45	2	0	6	142	140	2	0	2	2	0	0	0	0	2					
					74	72	—	—	2	33	33	—	—	—	—	—	—	—	—	—					
					906	247	80	47	532	209	135	—	—	—	—	—	—	—	—	—					
					876	513	20	15	328	135	94	6	3	3	2	1	2	1	0	3					
	631	382	394	313	—	—	—	—	—	—	—	1,336	828	508	841	195	168	132	19	686					
	855	504	504	504	—	—	—	—	—	—	—	806	390	416	503	132	89	82	59	331					
	156	249	249	249	—	—	—	—	—	—	—	440	281	159	281	199	39	21	8	220					
TOTAL	1642	1135	1147	1066	—	—	—	—	—	—	—	2,582	1,499	1083	1,625	426	296	235	86	1,243	1				

N B. :—

Number of patients on 1st Jan 1945	...	...	487
Number of patients admitted during the year	...	...	1347
Number of patients discharged during the year	...	...	1336
Average duration of stay	...	...	133
Number of patients on Dec. 31, 1945	...	...	498

Helwan	Abbassia	Giza	Damara
487	464	104	—
1347	804	473	—
1336	806	440	—
133	182	101	—
498	462	137	—



DISPENSARIES DURING THE YEAR 1945

to Sanatorium)						New Contacts (Disp.)			Cases under Observation (Disp.)	Hæmoptysis	Sputum Examination				X-Ray Examination						
(Disp.)		Classes (Sanat.)				Children	Adults	T.B. Contacts			Total of Sputum	Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases		Old Patients		
Cases recorded for Sanat.	Cases admitted to Sanat.	1st	2nd	3rd Paying	3rd Gratis							No.	Pos.	No.	Pos.		No.	Pos.	No.	Pos.	No.
484	335	—	—	—	—	505	539	29	394	—	1,880	1,781	590	99	80	1,417	1,211	596	206	—	—
473	296	—	—	—	—	403	554	43	262	56	1,390	1,053	520	237	27	1,296	1,214	410	81	1	—
498	315	—	—	—	—	278	411	1	—	—	1,898	1,269	495	629	186	1,189	919	753	—	270	—
144	66	—	—	—	64	71	99	4	106	6	752	446	315	306	181	655	480	367	158	17	—
297	200	—	—	—	—	491	535	31	119	—	2,743	1,283	427	1,460	455	810	788	635	22	—	—
182	126	—	—	—	72	200	226	19	154	48	746	463	234	283	131	550	380	255	165	5	—
409	275	—	—	—	74	202	242	42	51	55	1,441	866	363	575	280	388	229	100	153	6	—
72	60	—	—	—	—	94	125	1	—	—	575	451	134	124	38	285	217	197	38	30	—
113	76	—	—	—	—	201	181	6	107	—	875	647	248	228	64	441	390	279	51	—	—
200	134	—	—	—	69	124	263	18	120	21	1,213	757	271	456	183	505	393	246	106	6	—
409	127	—	—	—	169	116	213	27	139	6	1,148	891	320	257	127	1,353	948	436	372	23	11
109	76	—	—	—	66	119	224	10	54	2	61	283	203	578	206	396	196	193	141	59	19
41	44	—	—	—	44	93	141	4	181	31	1,123	668	215	455	130	125	67	46	54	4	1
11	54	—	—	—	21	96	105	1	187	1	602	388	127	214	88	490	368	153	103	19	2
125	125	—	—	—	121	107	129	8	17	12	1,095	426	156	669	336	398	247	174	127	24	1
24	16	—	—	—	—	148	205	5	111	—	179	170	101	9	7	95	82	28	13	—	—
32	29	—	—	—	21	55	81	4	47	5	239	209	85	30	9	752	717	125	35	—	—
3,683	2,354	—	—	—	724	3303	4273	253	20,49	213	18,669	12,051	4,904	6,609	2,528	11,135	8,846	4,993	1825	464	35
4	2	—	—	—	—	—	—	—	—	—	14	14	10	—	—	14	14	14	—	—	—
1	0	—	—	—	—	—	—	—	—	—	12	12	8	—	—	11	11	11	—	—	—
—	—	—	—	—	—	2	2	—	—	—	12	12	7	—	—	—	—	—	—	—	—
7	6	—	—	—	—	44	85	2	42	—	63	59	37	4	3	29	24	12	5	—	—
—	—	—	91	149	1107	—	—	—	—	59	5,374	1,347	995	4,027	1,719	2,450	418	418	2032	—	—
—	—	—	40	86	678	—	—	—	—	473	4,532	804	625	3,728	1,606	2,093	743	670	1304	46	—
—	—	—	—	—	473	—	—	—	—	124	1,425	473	333	952	480	509	320	294	189	—	—
—	—	—	131	235	2258	—	—	—	—	656	11,331	2,624	1,953	8,707	3,805	5,052	1,481	1,382	3525	46	—

Treatment					Operations												No. of Deaths	REMARKS
Tuberculin	Gold	Other Injections	Exercise Treatment	General Treatment	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Broncoscopy or Broncography	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Returned admission to Sanatorium		
—	—	—	—	—	16	—	651	—	—	—	—	—	—	—	—	—	216	Boulac Dispensary
—	—	—	—	—	23	1	2707	—	—	—	—	—	—	—	—	—	193	Mobtadayan
—	—	—	—	—	4	—	2429	—	—	—	—	—	—	—	—	—	279	Khalifa
—	—	—	55	92	1	43	2287	—	—	—	—	—	—	—	—	—	28	Damanhour
—	—	—	—	—	17	4	1899	—	—	—	22	26	—	—	—	—	99	Alexandria
—	—	—	—	—	6	42	1590	—	—	—	—	—	—	—	—	—	50	Tanta
—	—	—	—	—	46	17	2022	—	—	—	—	—	—	—	6	—	96	Mansoura
—	—	—	—	40	—	22	340	—	—	—	—	—	—	—	—	—	11	Mehalla el Kobra
—	—	139	—	—	19	2	628	—	—	—	—	—	—	—	—	—	58	Shebin el Kcm
—	—	—	—	—	—	26	1383	—	—	—	—	—	—	—	—	—	37	Zagazig
—	—	117	100	169	10	188	3104	—	—	—	—	—	—	—	—	—	84	Damietta
—	—	—	—	—	20	35	925	1	1	—	—	—	—	—	—	—	100	Port Said
—	—	124	—	—	20	27	970	—	—	—	—	—	—	—	—	—	73	Fayoum
—	—	—	—	—	10	12	423	—	—	—	—	—	—	—	—	—	32	Minia
—	—	36	—	—	6	51	305	—	—	—	—	—	—	—	—	—	34	Assiut
—	—	—	—	—	9	9	205	—	—	—	—	—	—	—	—	—	19	Qena
—	—	—	—	—	1	11	47	—	—	—	—	—	—	—	—	—	40	Aswan
—	—	416	165	305	304	519	32385	1	1	—	22	26	—	—	6	—	1452	TOTAL
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Menouf Branch.
—	—	—	—	—	—	—	17	—	—	—	—	—	—	—	—	—	—	Benha Branch.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Samalut Branch.
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Luxor Branch.
0	24	218	70	119	44	258	6530	308	249	—	—	—	—	—	2	10	—	Helwan Sanat.
3	303	626	95	288	192	403	8080	191	146	—	—	—	37	9	10	1	—	Abbassia.
—	—	124	74	85	55	144	4004	—	—	—	—	—	—	—	—	—	—	Giza
83	327	9866	239	442	341	835	1804	499	395	—	—	—	37	9	12	11	—	TOTAL

Tanta	Mansoura	Zagazig	Damietta	Port Said	Fayoum	Minia	Assiut	Aswan
18	25	17	35	13	16	—	15	—
72	74	69	169	66	44	21	124	21
71	74	70	172	61	40	6	103	7 5
101	151	125	74	70	163	14	119	0
19	25	16	32	18	19	15	36	16



TABLE No. 34.—ANNUAL RETURN OF CASES ADMITTED TO EL-MARG T.B. CONVALESCENTS COLONY DURING THE YEAR 1945

Month	No. of Convalescents	Below 20 Years	20-29 Years	30-39 Years	40-49 Years	Above 50 Years	Tailor	Carpenter	Shoe-Maker	Tin Smith	Peasant	Other Industries	Health Condition still under Treat.	Kind of Relation							Discharged		Referred to Sanatorium		REMARKS
														Fathers	Mothers	Wives	Sons	Brothers	Sisters	other Relatives	Convales.	Contacts	Convales.	Contacts	
January ... ..	6	—	3	3	—	—	—	2	1	—	2	1	—	—	1	3	6	—	—	1	—	—	—	—	
February ... ..	8	—	2	2	4	—	1	1	2	4	—	—	5	—	—	1	2	2	4	—	1	3	—	—	
March ... ..	4	—	3	1	—	—	2	1	1	—	—	—	—	—	1	1	3	—	—	—	3	9	—	—	
April ... ..	6	1	4	1	—	—	4	1	—	1	—	—	—	—	2	4	4	3	—	—	1	—	1	—	
May ... ..	1	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
June ... ..	1	—	—	1	—	—	—	—	1	—	—	—	—	—	—	1	3	—	—	—	—	—	1	—	
July ... ..	5	3	2	—	—	—	2	1	—	1	—	1	—	—	3	—	—	3	3	—	—	—	1	—	
August ... ..	5	1	2	2	—	—	1	2	—	2	—	—	—	—	—	2	1	—	—	—	—	—	—	—	
September ... ..	3	—	3	—	—	—	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	2	—	
October ... ..	1	—	1	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	3	—	
November ... ..	4	—	2	2	—	—	1	1	1	1	—	—	—	—	1	2	4	1	—	—	—	—	—	—	
December ... ..	1	—	1	—	—	—	—	—	1	—	—	—	—	—	1	1	—	1	—	—	1	—	—	—	
TOTAL ... ..	45	5	24	12	4	—	13	10	8	10	2	2	5	—	10	15	23	10	7	1	7	12	9	—	

No. of Convales. on 1st. Jan. 1945... 21  
" " admitted during 1945 45

No. of Convales. discharged during 1945 7  
" " on Dec. 31, 1945. 59



TABLE NO. 35.—ANNUAL RETURN OF THE WORK OF

		Dis- charged		Diseases attacked children during their residence						NEW CHILDREN										
										Mantoux Test in Child			Their Relative Patients							
													Condition				Relation			
		Died	Discharged	Other diseases	Chest	Ophthalmic	Intestinal	Stomach	Skin	Not Done	Pos.	Neg.	+ X.R.	+ Sputum	Alive	Died	Other relatives	Sister	Brother	Mother
Zeitoun Preventorium ... ..	14	100	7	5	20	24	7	27	40	46	33	72	47	118	1	4	6	8	45	56
Marg " ... ..	—	36	1	—	27	—	—	15	30	7	7	6	4	34	10	2	1	1	5	35
Alexandria Prevent. ... ..	—	23	—	—	1	—	1	—	28	—	—	28	28	25	3	—	—	—	11	17
Assiut Prevent. ... ..	—	49	7	1	16	1	2	15	42	—	—	—	—	42	—	4	—	3	22	13
TOTAL ... ..	14	208	15	6	24	25	10	57	140	53	40	106	79	219	14	10	7	12	83	121

	Zeitoun	Marg	Alex.	Assiut
N.B.—				
Number of Children on January 1, 1945 ... ..	83	36	43	40
" " admitted during the year ... ..	119	44	28	42
" " discharged " " ... ..	114	36	23	49
" " on December 31, 1945. ... ..	83	44	48	33

TABLE NO. 36.—ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME SANATORIUM AND

OUT-PATIENT SECTION																				
New Patients											Old Patients					Treatment		Dressings	Minor Operations	X-Rays
Total	Under 5 years		5-10 years		Over 10 years		Rickets	T.B. Spine	T.B. bones and joints	Other diseases	Total	Rickets	T.B. bones and joints	T.B. Spine	Other diseases	By Electricity	By Ultra Violet			
	M.	F.	M.	F.	M.	F.														
290	41	23	31	25	85	85	12	24	55	199	374	—	138	8	228	—	171	28	53	63
591	45	36	68	37	243	162	16	246	213	116	623	29	241	302	51	—	—	—	—	—
881	86	59	99	62	348	2	28	270	268	315	997	29	379	310	279	—	171	28	53	63

N.B.—	Alexandria	Helwan
Number of patients on January 1, 1945 ... ..	73	100
" " " admitted during the year ... ..	124	165
" " " discharged during the year ... ..	121	154
" " " remaining on December 31, 1945	76	111



THE PREVENTORIA DURING THE YEAR 1945

ADMITTED																									No. of new children
AGES																									
Above 10 years		10 years		9 years		8 years		7 years		6 years		5 years		4 years		3 years		2 years		1 year		Under one year			
F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		
5	1	3	4	2	5	6	8	1	6	5	8	6	9	4	1	2	1	5	2	2	2	16	15	119	
—	—	—	1	—	4	—	1	—	1	6	7	3	4	1	3	2	2	1	—	1	1	5	1	44	
2	—	—	1	2	—	2	2	1	3	—	4	2	1	2	—	—	2	3	—	—	—	1	—	23	
—	—	—	—	—	—	—	—	7	1	—	3	2	4	3	3	1	4	—	—	1	—	7	6	42	
7	1	3	6	4	9	8	11	9	11	11	22	13	18	10	7	5	9	9	2	4	3	29	22	233	

PRINCESS KHADIGA ABBAS HALIM HOSPITAL FOR BONE DISEASES AT HELWAN DURING THE YEAR 1945

IN-PATIENT SECTION																							
New Patients												Discharged						Treatment					
Total	Under 5 years		5-10 years		Over 10 years		T.B. Spine	T.B. Hip	T.B. Knee	T.B. other joints	Other diseases	Total	Died	Cured	Stationary	Improved	Discharged in plaster	By Electricity	By Ultra Violet	Major Operations	Plaster	X-Rays	
	M.	F.	M.	F.	M.	F.																	
124	5	6	14	14	45	40	42	16	16	31	19	121	5	21	18	49	28	—	—	18	84	297	Alexandria Maritime Sanat.
165	11	4	19	10	77	44	69	14	8	20	54	154	—	46	38	64	6	—	71	32	108	635	Princess Khadiga Abbas Halim Hosp. for Bone diseases at Helwan
289	16	10	33	24	122	84	111	30	24	51	73	275	5	67	56	113	34	—	71	50	194	932	

## Chapter VII.—VENEREAL AND SKIN DISEASES

Amongst the patients seeking treatment at the Skin and Venereal diseases clinics during the year, a total of 268,763 patients were found suffering from either of these diseases as against 226,092 in 1944.

### *Gonorrhoea.*

The number of patients treated for gonorrhoea during the year was 18,127 as against 15,618 in 1944 (Table No. 46). 3,709 gonorrhoea patients were cured.

### *Syphilis.*

The number of patients treated for syphilis was 12,129 as against 14,785 in 1944 (Table No. 45). 463 patients were cured.

### *Skin and Other Venereal Diseases.*

238,507 patients were treated for skin and other venereal diseases as against 64,831 in the previous year. 6,452 patients were treated for scabies and 1,396 for other venereal diseases. A total of 108,000 patients were cured during the year.

Propaganda was carried out throughout the country drawing the attention of the public to the danger of venereal diseases and the great importance of completing treatment.

Sulpha drugs and penicillin are being tested in the treatment of venereal diseases at the V.D. clinics.

The following tables give detailed statistics of the various skin and venereal diseases treated during the year.

TABLE NO. 37.—REMAINING CASES (UNDER TREATMENT) FROM 1944  
IN VENEREAL DISEASES HOSPITALS

Hospital	Syphilis		Gonorrhoea		Chancroid	Skin Diseases
	P.	A.W.	P.	A.W.		
Hod-el-Marsoud ... ..	14	40	18	65	7	14
Gabbary ... ..	10	14	4	38	1	6
<b>TOTAL ... ..</b>	<b>24</b>	<b>54</b>	<b>22</b>	<b>103</b>	<b>8</b>	<b>20</b>

TABLE NO. 38.—NEW CASES DURING THE YEAR 1945

Hospital	Syphilis		Gonorrhoea		Chancroid	Skin Diseases
	P.	A.W.	P.	A.W.		
Hod-el-Marsoud ...	277	815	515	2,957	100	350
Gabbary ... ..	254	328	374	347	147	53
<b>TOTAL ... ..</b>	<b>531</b>	<b>1,143</b>	<b>889</b>	<b>3,304</b>	<b>247</b>	<b>403</b>

TABLE NO. 39.—SYPHILIS AND CHANCROID DURING THE YEAR 1945

Hospital	Primary		Second.		Latent		Tert.		Hered.		Total		Improved Cases		Chan-croid	Imp-Cases
	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.		
Hod-el-Marsoud ...	1	2	95	364	181	449	—	—	—	—	277	815	281	817	100	103
Gabbary ... ..	17	51	10	52	227	225	—	—	—	—	254	328	264	328	147	140
TOTAL ... ..	18	53	105	416	408	674	—	—	—	—	531	1143	545	1145	247	243

TABLE NO. 40.— GONORRHOEA DURING THE YEAR 1945

Hospital	Acute		Chronic		Total		Cases Cured	
	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.
Hod-el-Marsoud ... ..	—	—	515	2,957	515	2,957	520	2,901
Gabbary ... ..	—	—	374	347	374	347	376	372
TOTAL	—	—	889	3,304	889	3,304	896	3,273



TABLE No. 41.—DISTRICTS FROM WHICH PATIENTS WERE FORWARDED DURING THE YEAR 1945

Hospital	Cairo		Alex.		Port-Said		Ismailia		Suez		Damietta		Benha		Shébin-el-Kom		Tanta		Kafr el Zayat		Zagazig		Abou-Hammad		Mansoura		Fayoum		Beni-Suef	
	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.
Hod-el-Marsoud ... ..	146	2527	—	—	94	17	2	29	11	16	—	12	—	3	—	1	23	32	—	4	108	3	—	156	110	117	19	25	4	4
Gabbary ... ..	—	—	1155	1428	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

TABLE No. 42.—DISTRIBUTION OF BEDS DURING 1945

Hospital	1st Class	2nd Class	3rd - Class Spec.	3rd Class Ord.	Children	Opth. Branch	Total Beds for Patients	Beds for Staff	Total No. of Beds
Hod-el-Mar- soud... ..	—	—	14	263	—	—	277	8	285
Gabbary ...	—	—	10	183	—	—	193	16	209
<b>TOTAL ...</b>	<b>—</b>	<b>—</b>	<b>24</b>	<b>446</b>	<b>—</b>	<b>—</b>	<b>470</b>	<b>24</b>	<b>494</b>

TABLE No. 43.—NUMBER OF IN AND OUT-PATIENTS TREATED AND VISITS PAID TO HOSPITALS DURING THE YEAR 1945

Hospital	In-Patients	Out-patients	No. of Visits
Hod-el-Marsoud ... ..	3,420	1,757	8,695
Gabbary ... ..	2,583	108	1,148
<b>TOTAL ... ..</b>	<b>6,003</b>	<b>1,865</b>	<b>9,843</b>

TABLE NO. 44.—NEW CASES AND VISITS

Locality of Clinic	NEW CASES									
	Syphilis		Gonorrhoea		Skin Diseases		Other V. Dis.		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab ... ..	311	283	818	1,080	2,723	7,088	8	62	3,860	8,513
Sh bra ... ..	352	191	624	537	6,045	8,484	—	—	7,021	9,212
Gamalia ... ..	737	405	1,377	3,131	2,289	2,087	85	8	4,488	5,631
Abbassia ... ..	73	29	74	403	448	2,542	—	—	595	2,974
Port-Said... ..	265	116	186	291	3,360	3,695	20	295	4,131	4,397
Suez... ..	120	52	159	1,484	3,951	5,261	33	—	4,263	6,797
Bamietta... ..	123	119	39	2	4,886	5,349	1	—	5,049	5,470
Qenha ... ..	106	155	76	199	2,615	2,603	6	—	2,803	2,957
Shebin-el-Kom ... ..	380	262	150	411	6,114	11,285	8	—	6,652	11,958
Tanta ... ..	325	210	242	715	7,730	8,249	5	—	8,302	9,174
Mehalla-el-Kobra ... ..	203	132	114	171	3,914	2,900	9	7	4,240	3,210
Zagazig ... ..	245	203	178	33	5,362	4,534	90	1	5,875	4,77
Mansoura ... ..	226	212	291	1,106	3,568	3,925	154	25	4,239	5,268
Mit-Ghamr ... ..	123	196	46	20	2,495	6,233	—	—	2,664	6,449
Damanhour ... ..	280	138	105	229	4,485	5,083	—	—	4,870	5,450
Giza... ..	124	115	172	501	1,872	7,030	1	—	2,169	7,644
Fayoum ... ..	478	272	197	253	1,836	2,768	—	—	2,511	3,293
Sennoris ... ..	91	120	37	123	2,209	5,030	24	101	2,361	5,374
Beni-Suef ... ..	137	77	100	261	5,530	5,678	7	1	5,774	6,047
Minia ... ..	449	196	227	966	3,821	5,228	104	—	4,601	6,300
Assiut ... ..	159	196	59	39	4,435	7,253	—	—	4,653	7,488
Deirut ... ..	158	238	22	14	2,044	2,789	—	—	2,224	3,041
Gerga ... ..	275	187	58	24	4,683	8,021	1	—	5,107	8,232
Tahta ... ..	265	247	24	68	2,462	5,011	—	—	2,751	5,326
Suhag ... ..	181	161	50	10	3,714	3,309	3	—	3,948	3,480
Qena ... ..	206	195	85	132	2,003	2,759	3	1	2,297	3,087
Nag Hamadi ... ..	163	187	63	109	1,077	1,326	5	—	1,308	1,622
Luxor ... ..	202	273	87	59	1,729	2,080	9	19	2,027	2,431
Aswan ... ..	103	102	53	43	766	1,345	—	—	922	1,490
TOTAL ... ..	6,860	5,269	5,713	12,414	98,166	138,945	876	520	111,615	157,148



TO THE SKIN AND VENEREAL DISEASES DURING 1945

NUMBER OF VISITS								TOTAL	
Syphilis		Gonorrhoea		Skin Diseases		Other V. Dis.		M.	F.
M.	F.	M.	F.	M.	F.	M.	F.		
4,327	5,721	4,084	4,687	3,091	6,634	4	22	11,506	17,064
9,073	5,382	3,238	4,637	2,669	4,695	—	—	14,980	14,714
13,553	10,652	3,590	12,650	1,565	1,501	214	49	18,922	24,852
764	252	612	3,980	373	2,322	30	5	1,779	6,559
3,985	5,787	1,043	2,582	1,841	2,751	546	703	7,415	11,823
1,705	1,153	921	322	1,177	1,448	180	—	3,983	2,923
627	763	149	128	2,934	3,236	—	—	3,710	4,132
1,390	2,248	457	2,427	1,240	1,146	4	—	3,091	5,821
6,689	7,360	1,471	3,381	3,222	8,395	—	—	11,382	19,136
6,308	6,033	1,060	7,344	4,690	7,899	—	—	12,058	21,276
5,597	5,143	760	1,940	925	877	9	41	7,291	8,001
2,187	3,620	3,958	1,513	1,056	1,915	146	—	7,947	7,048
5,330	7,044	1,682	5,083	655	1,318	190	20	7,857	13,465
2,817	5,436	826	327	1,193	2,589	1	—	4,837	8,352
3,080	2,034	887	4,274	3,034	3,285	50	1,462	7,051	11,055
2,388	3,169	1,102	5,279	1,248	3,428	1	—	4,739	11,876
6,342	6,682	1,122	3,072	1,634	2,690	—	—	9,098	12,444
1,542	3,260	335	954	1,705	3,085	201	1,163	3,783	8,482
2,740	2,983	607	3,407	2,536	2,522	22	6	5,905	8,918
9,354	6,329	1,600	1,482	1,771	2,626	156	—	12,881	10,437
3,746	6,183	564	431	508	468	—	—	4,818	7,082
2,437	5,808	87	27	977	1,289	—	—	3,501	7,124
2,824	2,908	245	162	1,658	3,945	—	—	4,727	7,015
2,732	4,627	181	1,154	302	398	—	—	3,215	6,179
3,818	5,724	178	64	1,517	1,680	—	—	5,513	7,468
2,607	4,093	342	1,538	784	1,003	6	—	3,739	6,634
4,290	6,151	394	645	321	387	4	—	5,009	7,183
4,269	6,662	772	317	985	1,229	192	535	6,218	8,743
2,570	4,802	299	475	510	950	—	—	3,379	6,227
119,091	138,014	32,566	74,282	46,721	75,711	1,956	4,006	200,334	292,013

TABLE NO. 45.—SYPHILIS DURING THE YEAR 1945

Locality of Clinic	Syphilis												Total	
	Primary		Secondary		Tert.		Latent		Herd.		Nervous		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Sayeda Zeinab ... ..	114	21	86	74	30	21	78	155	3	12	—	—	311	283
Shoubra ... ..	161	34	85	44	12	4	73	81	21	28	—	—	352	191
Gamalia ... ..	315	47	258	151	31	6	114	178	13	22	6	1	737	405
Abbassia... ..	22	3	4	4	5	2	35	16	6	4	1	—	73	29
Port-Said ... ..	71	10	72	22	7	3	87	54	27	27	1	—	265	116
Suez... ..	22	1	59	18	15	1	10	25	10	6	4	1	120	52
Damietta ... ..	11	3	15	7	9	4	75	81	13	24	—	—	123	119
Be' ha ... ..	12	—	13	10	17	12	58	127	5	6	1	—	106	155
Shebin-el-Kom ... ..	189	14	62	57	6	6	86	154	37	31	—	—	380	262
Tanta ... ..	87	13	71	40	65	19	67	112	35	26	—	—	325	210
Mehalla-el-Kobra... ..	37	3	70	40	38	17	28	59	26	11	4	2	203	132
Zagazig ... ..	129	11	75	85	15	35	19	69	3	3	4	—	245	203
Mansoura ... ..	66	17	54	38	25	25	64	113	16	19	1	—	226	212
Mit-Ghamr ... ..	10	2	10	9	14	18	64	143	24	24	1	—	123	196
Damanhour ... ..	102	4	69	35	59	31	36	54	9	12	5	2	280	138
Giza ... ..	42	8	26	10	10	5	34	73	10	18	2	1	124	115
Fayoum ... ..	75	8	201	148	167	85	10	9	24	22	1	—	478	272
Sennoris ... ..	28	2	15	15	29	39	17	59	2	5	—	—	91	120
Beni-Suef ... ..	27	3	72	35	17	18	17	17	2	4	2	—	137	77
Minia ... ..	234	9	142	52	10	6	37	108	24	21	2	—	449	196
Assiut ... ..	28	4	21	18	9	14	65	112	35	48	1	—	159	196
Deirout ... ..	28	1	60	41	11	14	40	146	19	36	—	—	158	238
Gerga ... ..	118	2	85	62	37	29	20	78	15	16	—	—	275	187
Tahta ... ..	39	—	64	43	29	32	63	118	68	53	2	1	265	247
Suhag ... ..	18	1	55	23	7	19	68	96	33	22	—	—	181	161
Qena ... ..	29	—	58	40	13	21	53	100	49	32	4	2	206	195
Nag-Hammadi ... ..	33	3	63	43	15	20	42	96	8	24	2	1	163	187
Luxor ... ..	37	4	36	30	38	50	61	135	25	53	5	1	202	273
Aswan ... ..	28	3	9	6	13	9	35	58	15	24	3	2	103	102
TOTAL ... ..	2112	231	1910	1200	753	565	1456	2626	577	633	52	14	6860	5269



TABLE NO. 46.—GONORRHOEA DURING 1945

Locality of Clinic	Gonorrhoea						Total	
	Acute		Chronic		Urethritis			
	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab ... ..	488	76	330	971	—	33	818	1,080
Shoubra ... ..	413	329	211	208	—	—	624	537
Gamalia ... ..	1,077	1,191	194	1,095	106	845	1,377	3,131
Abbassia... ..	41	191	26	212	7	—	74	403
Port-Said ... ..	107	49	8	29	71	213	186	291
Suez ... ..	116	45	14	—	29	1,439	159	1,484
Damietta ... ..	27	2	10	—	2	—	39	2
Benha ... ..	33	127	42	27	1	45	76	199
Shebin-el-Kom ... ..	117	49	17	19	16	343	150	411
Tanta ... ..	158	53	53	660	31	2	242	715
Mehalla-el-Kobra ... ..	87	15	13	7	14	149	114	171
Zagazig ... ..	178	32	—	1	—	—	178	33
Mansoura ... ..	141	33	1	14	149	1,059	291	1,106
Mit-Ghamr ... ..	44	8	2	12	—	—	46	20
Damanhour ... ..	89	24	13	39	3	166	105	229
Giza ... ..	97	271	68	129	7	101	172	501
Fayoum ... ..	183	225	14	28	—	—	197	253
Sennoris ... ..	19	4	15	94	3	25	37	123
Beni-Suef ... ..	64	21	11	23	25	217	100	261
Minia ... ..	168	16	9	89	50	861	227	966
Assiut ... ..	46	2	4	36	9	1	59	39
Deirout ... ..	10	2	4	3	8	9	22	14
Gerga ... ..	44	6	8	10	6	8	58	24
Tahta ... ..	18	1	5	11	1	56	24	68
Suhag ... ..	34	2	—	—	16	8	50	10
Qena ... ..	57	26	24	106	4	—	85	132
Nag Hammadi ... ..	44	58	19	51	—	—	63	109
Luxor ... ..	53	8	15	17	19	34	87	59
Aswan ... ..	23	5	14	—	16	38	53	43
TOTAL ... ..	3,976	2,871	1,144	3,891	593	5,652	5,713	12,414



TABLE NO. 47.—CHANCROID, VEGEDENIC ULCER AND SKIN DISEASES DURING 1945

Locality of Clinic	Chancroid		Vege- denic Ulcer	Other V.D.		Total		Skin Diseases	
	M.	F.		M.	F.	M.	F.	M.	F.
Sayeda Zeinab ... ..	—	—	—	8	62	8	62	2,723	7,088
Shoubra ... ..	—	—	—	—	—	—	—	6,045	8,484
Gamalia ... ..	82	8	3	—	—	85	8	2,289	2,087
Abbassia ... ..	—	—	—	—	—	—	—	448	2,542
Port-Said ... ..	1	—	1	318	295	320	295	3,360	3,695
Suez... ..	33	—	—	—	—	33	—	3,951	5,261
Damietta ... ..	—	—	—	1	—	1	—	4,886	5,349
Benha ... ..	6	—	—	—	—	6	—	2,615	2,603
Shebin-el-Kom ... ..	1	—	7	—	—	8	—	6,114	11,285
Tanta ... ..	5	—	—	—	—	5	—	7,730	8,249
Mahalla-el-Kobra ... ..	—	—	1	8	7	9	7	3,914	2,900
Zagazig ... ..	61	1	29	—	—	90	1	5,362	4,531
Mansoura ... ..	154	25	—	—	—	154	25	3,568	3,925
Mit-Ghamr ... ..	—	—	—	—	—	—	—	2,495	6,233
Damanhour ... ..	—	—	—	—	—	—	—	4,485	5,083
Giza ... ..	1	—	—	—	—	1	—	1,872	7,030
Fayoum ... ..	—	—	—	—	—	—	—	1,836	2,768
Sennoris ... ..	14	—	5	5	101	24	101	2,209	5,030
Beni-Suef ... ..	4	—	—	3	1	7	1	5,530	5,678
Minia ... ..	40	—	—	64	—	104	—	3,821	5,228
Assiut ... ..	—	—	—	—	—	—	—	4,435	7,253
Deirout ... ..	—	—	—	—	—	—	—	2,044	2,789
Gerga ... ..	—	—	1	—	—	1	—	4,683	8,021
Tahta ... ..	—	—	—	—	—	—	—	2,462	5,011
Suhag ... ..	3	—	—	—	—	3	—	3,714	3,309
Qena ... ..	—	—	—	3	1	3	1	2,003	2,759
Nag-Hammadi ... ..	5	—	—	—	—	5	—	1,077	1,326
Luxor ... ..	1	—	8	—	19	9	19	1,729	2,080
Aswan ... ..	—	—	—	—	—	—	—	766	1,345
TOTAL ... ..	411	34	55	410	486	876	520	98,166	138,945

TABLE NO. 48.—CURED CASES DURING 1945

Locality of Clinic	Syphilis		Gonorrhoea		Chancroid		Vegedenic Ulcer	Skin Dieases		Other V. D.	
	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.
Sayeda Zeinab ...	—	—	243	10	—	—	—	—	—	3	19
Shoubra ... ..	22	14	346	331	—	—	—	4,087	6,162	—	—
Gamalia ... ..	68	49	457	599	53	6	3	1,386	1,787	—	—
Abbassia... ..	—	—	11	66	—	—	—	291	1,924	—	—
Port-Said ... ..	10	18	16	44	—	—	—	8	9	—	1
Suez ... ..	—	—	76	17	27	—	—	2,741	3,829	—	—
Damietta ... ..	—	—	5	—	—	—	—	2,492	2,877	—	—
Benha ... ..	57	85	33	90	4	—	—	1,058	1,193	—	—
Shebin-el-Kom ...	—	—	2	5	—	—	—	4,027	7,240	—	—
Tanta ... ..	—	—	96	218	3	—	—	5,558	6,290	—	—
Mehalla-el-Kobra ...	1	—	13	4	—	—	—	802	703	4	5
Zagazig ... ..	4	5	32	21	21	—	2	135	110	—	—
Mansoura ... ..	8	16	58	36	59	9	—	1,801	2,125	—	—
Mit-Ghamr ... ..	—	—	10	1	—	—	—	1,157	2,255	—	—
Damanhour ... ..	—	—	35	42	—	—	—	3,657	4,222	1	27
Giza ... ..	—	—	45	138	1	—	—	978	3,526	—	—
Fayoum ... ..	—	6	21	136	—	—	—	—	—	—	—
Senoris ... ..	4	12	23	60	10	—	6	689	1,816	—	37
Beni-Suef ... ..	—	—	46	75	2	—	—	4,101	4,011	1	1
Minia ... ..	3	13	69	58	37	—	—	577	651	25	—
Assiut ... ..	—	—	19	21	—	—	—	89	92	—	—
Deirout ... ..	—	—	3	1	—	—	—	1,126	1,571	—	—
Gerga ... ..	16	33	13	11	—	—	—	1,175	2,566	—	—
Tahta ... ..	—	—	1	—	—	—	—	1,569	2,642	—	—
Suhag ... ..	—	2	4	—	2	—	—	1,647	1,555	—	—
Qena ... ..	2	10	—	1	—	—	—	1,662	2,020	—	—
Nag-Hammadi ...	1	—	—	1	—	—	—	660	821	—	—
Luxor ... ..	—	—	15	1	1	—	5	881	1,139	13	32
Aswan ... ..	1	3	14	16	—	—	—	19	71	—	—
TOTAL ... ..	197	266	1,706	2,003	220	15	16	44,373	63,207	47	122

TABLE NO 49-NEW SCABIES CASES AND NUMBER OF VISITS TO  
BATH HOUSE FOR TREATMENT DURING THE YEAR 1945

New Cases		Number of Visits	
M	F	M	F
4,344	2,108	13,113	7,128

HOSPITALS AND CLINICS FROM WHICH PATIENTS WERE FORWARDED DURING THE YEAR 1945

Shoubra Clinic		Sayeda Zeinab Clinic		Gamalia Clinic		Abbassia Clinic		Giza Clinic		Demerdash Hospital		Polyclinic Boulac		Other Units	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1,376	1281	301	161	475	55	1	—	41	14	911	257	882	285	357	55



## Chapter VIII.—MENTAL DISEASES

The Lunacy Law No. 141 of 1944 was put this year into force with advantage to patients. The need for more accommodation for the insane is acutely felt.

The accommodation in the Abbassia and Khanka Hospitals remained the same as in previous years, namely 3,334. The average number of patients accommodated daily in the two hospitals during 1945 was 4,311. The number of patients remaining at the end of December 1945 was 4,395.

Since the Lunacy Law limited the circumstances under which patients may be discharged from hospitals, the number of discharges consequently decreased.

### *Admissions and Discharges.*

2,263 new patients (1,422 males and 841 females) were admitted during the year. The number of patients remaining at the end of December 1944 was 4,198 (2,775 males and 1,423 females). This gives a total of 6,461 patients under treatment in the two hospitals during 1945. Of these, 1,757 patients (1,120 males and 637 females) were discharged: 125 as recovered, 1,367 as relieved, 179 as not improved and 86 as not insane.

### *Escapes.*

During the year five patients succeeded in escaping, two from Khanka Hospital and three from Abbassia.

### *Deaths.*

287 deaths (175 males and 112 females) occurred among patients or 4·7 per cent of patients under treatment.

### *Pellagra.*

817 cases suffering from pellagra (524 males and 293 females) were admitted during the year as against 769 last year.

### *Accused persons suspected of Insanity.*

Of 169 accused persons sent during the year by the public prosecutor for examination and report, 34 were accused of crimes against life, 54 of thefts or attempted thefts, 30 of crimes against property. Reports were also required by the prosecutor in respect of 56 patients admitted by the ordinary way. This brings the total reports made during the year to 225.

### *Forms of Insanity.*

The forms of insanity most common amongst new admissions were Manic Depressive, Psychosis, Schizophrenia, Confusional Psychosis (including those complicating pellagra) and Mental Deficiency.

### *Convulsion Therapy and Penicillin.*

This continued to be practised both with cardiazol and the electrical apparatus. No such apparatus is available at Khanka hence cardiazol was only used.

Cases of general paralysis were treated with penicillin with slight improvement in some.

### *Dental and Ophthalmic Clinics.*

Valuable service was rendered to the patients by both the dental and ophthalmic clinics.

### *Treatment for Parasitic Diseases.*

1,344 male and 669 female residents in Abbassia Hospital were examined and treated for ancylostoma, bilharzia and other parasitic diseases by an Endemic Diseases Unit.

### *Out-patient Department.*

Only five patients were treated by this Department during the year.

### *Artificial Feeding.*

Artificial feeding was carried out 15,548 times without accident.

### *Epileptic Fits.*

5,377 epileptic fits were recorded during the year.

### *Physical Illnesses.*

9,162 cases of physical illnesses were treated locally at the two hospitals. These do not include cases referred to general hospitals for surgical and other treatment.

### *Births.*

Seven children were born during the year at Abbassia hospital.

### *Accidents.*

47 serious accidents occurred during the year with five ending fatally, in one of which a doctor was severely assaulted and had to remain under treatment for several months.

Some 1,900 minor accidents were recorded.

### *Suicides.*

One patient committed suicide while at Kasr-el-Aini Hospital and another attempted suicide. Three female patients committed suicide at Abbassia Hospital.

### *X-Ray.*

288 films were made at Abbassia Hospital besides 25 cases screened.

### *Power Station at Khanka.*

This was taken over by the Ministry in the course of the year.

### *Khanka Farm.*

This continues to serve its purpose as a means of occupational therapy to the patient and of supplying that hospital with vegetables and fruits.

### *Simple occupations.*

It is proposed to set up workshops for simple occupations such as copper tinning, shoe-making and repairing in both hospitals.



## Chapter IX.—HEALTH PROPAGANDA

The Ministry's Health Propaganda activities may be summarised as follows :—

- 1.—Health instruction of the uneducated classes of the population.
- 2.—Raising the standard of health education of the educated classes with a view to their participation in health propaganda activities.
- 3.—Propaganda campaign against infectious diseases and assisting other units in their propaganda activities.

For the first purpose, health propaganda units organise day-time and evening meetings. In the former, gramophone records are played and then followed by health lectures. In the evening meetings, health films are shown in addition. The Ministry has sought the aid of preachers in furthering health propaganda. The Ministry is now setting up provincial museums of hygiene provided with models of diseases and vectors. Artistic posters illustrating the various diseases, methods of infection and means of prophylaxis have also been prepared.

Pamphlets dealing with health questions are distributed by the propaganda units to the inhabitants, pupils and members of other institutions and establishments.

The radio is also used in broadcasting lectures, presentations and dialogues on matters of health. Seven health films and five plays have been prepared for showing in cinemas.

For the health instruction of the educated classes, the Ministry has, in conjunction with the School Hygiene Department of the Ministry of Education, organized health meeting in schools, formed health societies among students and provided the teachers with useful information about the different diseases particularly those to which young people are susceptible, e.g. eye diseases, parasitic and infectious diseases.

The Ministry also sought the co-operation of the Ministry of Social Affairs charging its co-operative societies, sporting clubs, social centres and rural reform societies with health propaganda amongst their members. Literature and posters on health have been supplied to these institutions for this purpose.

The Ministries of Wakfs, National Defence and Interior have been approached with a view to co-ordination of health propaganda activities amongst their personnel. Health propaganda meetings were held in these Ministries and pamphlets on health questions distributed to their staff.

During outbreaks of infectious diseases, health propaganda units hold meetings during which health lectures are given, films shown and pamphlets distributed dealing with the prevailing infectious diseases, methods of their control and protection therefrom. Meetings were also held throughout the country in connection with infectious diseases, child welfare, ophthalmic diseases, venereal diseases and tuberculosis.

The following statement gives the number of meetings held, pamphlets and posters distributed and lectures delivered :—

	No. of Meetings
Day-time meetings... ..	2,841
Evening meetings ... ..	1,750
Mulids' „ ... ..	68
General fairs ... ..	1,634
Schools ... ..	1,325
Labourers ... ..	37
Public circles ... ..	180
Social centres ... ..	195
Propaganda against small pox ... ..	635
„ „ typhus and Relapsing fever ... ..	3,694
„ „ endemic diseases .. ..	1,140
Child welfare ... ..	518
Propaganda against Malaria fever ... ..	660
<hr/>	
Posters distributed... ..	1,420
Pamphlets „... ..	430,000



## Part III.—TREATMENT

### Chapter X.—GENERAL HOSPITALS

#### *Number of Hospitals.*

There were 88 General Hospitals in operation this year. 27 of these were situated in Governorates and chief towns of provinces, 53 in bandar towns and 6 in the oases. There were besides two out-patient clinics for general diseases.

#### *Hospital Accommodation.*

The total number of hospital beds this year was 6,663 of which 5,730 were reserved for patients and 933 for the staff.

#### *Treatment.*

The number of in-patients amounted to 96,663, and the out-patients to 1,850,888.

The number of out-patient attendances during the year was 3,495,322.

#### *Surgical Operations.*

The number of surgical operations carried out in the in-patient departments this year was 37,730 and in the out-patient departments was 76,447. This gives a total of 114,177 operations carried out this year as compared with 32,174, 73,622 and 105,796 respectively on the previous year.

#### *X-Ray Examination.*

The number of cases examined and treated by X-Ray this year was 28,565 as against 21,639 in 1944.

#### *Deaths.*

The number of deaths amongst patients in the in-patient departments was 4,570 from a total of 96,663 in-patients, i.e. 4.72 per cent as compared with 5.99 per cent in last year.

TABLE NO. 50 —SHOWING GENERAL HOSPITALS IN OPERATION SINCE 1935

Year	Hospitals in Governorates and Chief Towns of Provinces	Hospitals in Bandar Towns	Village Hospitals	Hospitals in the Oases	Out-Patient Clinics
1935 ... ..	19	45	50	—	3
1936 ... ..	19	45	50	—	3
1937 ... ..	20	48	60	—	3
1938 ... ..	20	48	62	—	3
1939 ... ..	20	48	62	—	3
1940 ... ..	20	51	62	—	3
1941 ... ..	20	52	—	—	3
1942 ... ..	20	52	—	—	4
1943 ... ..	26	52	—	—	3
1944 ... ..	27	53	—	—	2
1945 ... ..	27	53	6	6	3

TABLE No. 51.—NUMBER OF BEDS IN GENERAL HOSPITALS

Year	No. of Beds	Remarks
1935 ... ..	5,852	
1936 ... ..	5,964	
1937 ... ..	6,341	
1938 ... ..	6,822	
1939 ... ..	6,979	
1940 ... ..	6,926	The Lock Hospitals were separated from the Section.
1941 ... ..	6,969	Village hospitals were separated from the Section.
1942 ... ..	6,830	
1943 ... ..	6,363	Alexandria Hospital was separated from the Ministry.
1944 ... ..	6,513	
1945 ... ..	6,663	

*Treatment.*

The following table shows the number of patients treated in the hospitals ;—

TABLE No. 52

Year	No. of In-Patients	No. of Out-Patients	No. of attendance to out-patient sections
1941 ... ..	93,029	2,596,697	2,142,282
1942 ... ..	95,587	2,375,913	2,258,883
1943 ... ..	87,326	1,749,732	3,256,737
1944 ... ..	94,895	2,286,758	3,980,336
1945 ... ..	96,663	1,850,888	3,495,322

*Operations and X-Ray Examinations,*

The following table shows the number of operations and X-Ray examinations performed in the hospitals during the last 5 years ;—

TABLE No. 53

Year	In-Patients Operations	Out-Patients Operations	Total	X-Ray Examinations
1941... ..	30,890	81,781	112,671	30,226
1942... ..	33,007	79,024	112,031	26,746
1943... ..	32,110	71,096	103,206	19,605
1944... ..	32,174	73,622	105,796	21,639
1945... ..	37,730	76,447	114,177	28,565

Deaths.

The following table shows the number of deaths among in-patients during the last five years and their ratio to patients treated ; —

TABLE No. 54

Year	No. of In-Patients	No. of Deaths	Percentage
1941... ..	93,029	6,943	7·46
1942... ..	95,587	7,218	7·53
1943... ..	87,326	5,860	6·71
1944... ..	94,895	5,678	5·99
1945... ..	96,663	4,570	4·72

The following table shows the number of prostitutes treated in the general and district hospitals during the year 1945 ;—

TABLE No. 55

	Number
Gonorrhoea ... ..	132
Syphilis ... ..	52
Other diseases ... ..	—
TOTAL ... ..	184

The following table gives the total number of patients treated from venereal diseases in the general and district hospitals during the year 1945 ;—

TABLE No. 56

In-Patient Sections			Out-Patient Sections		
Gonorrhœa	Syphilis	Total	Gonorrhœa	Syphilis	Total
146	302	448	562	5,824	6,386



TABLE No 57.— DISTRIBUTION OF BEDS

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Beds for Staff	Total No. of Beds
King's ... ..	—	—	—	218	9	—	227	81	308
Demerdash ... ..	20	—	—	353	12	50	435	151	586
Incurable Diseases, Helwan ... ..	—	—	—	90	—	—	90	15	105
Port-Said ... ..	2	2	12	165	13	—	124	14	208
Suez ... ..	4	11	—	218	—	—	233	18	251
Damietta ... ..	—	2	—	88	—	37	127	13	140
Damanhour ... ..	2	—	—	109	—	—	111	11	122
Tanta ... ..	—	4	—	220	—	—	224	28	252
Mansoura ... ..	—	—	—	202	—	—	202	11	213
Mit Ghamr... ..	—	—	—	47	—	—	47	7	54
Zagazig ... ..	1	3	—	220	—	—	224	16	240
Shebin-el-Kom ... ..	—	2	—	88	—	—	90	5	95
Benha ... ..	—	—	—	86	—	—	86	9	95
Kaliub... ..	—	—	—	74	—	—	74	4	78
Fayoum ... ..	—	1	—	100	—	—	101	6	107
Beni-Suef ... ..	—	1	—	95	—	—	96	6	102
Minia ... ..	—	2	—	108	12	—	122	33	155
Fikria ... ..	—	—	—	30	—	—	30	4	34
Maghagha ... ..	—	—	—	—	—	—	—	—	—
Assiut ... ..	—	4	—	189	11	—	204	18	222
Mallawi ... ..	—	—	—	15	—	11	26	4	30
Suhag ... ..	—	2	—	102	—	—	104	8	112
Tahta ... ..	—	—	—	32	—	—	32	5	37
Qena ... ..	—	1	—	90	—	—	91	10	101
Luxor ... ..	5	7	—	76	—	—	88	9	97
Esna ... ..	—	—	—	91	—	—	91	14	105
Aswan ... ..	1	2	—	73	—	—	76	3	79
Ismailia ... ..	—	—	—	92	—	—	92	12	104
Delingat ... ..	—	—	—	36	—	—	36	6	42
Kafr-el-Dawar ... ..	—	—	—	27	—	—	27	9	36
Rosetta ... ..	—	—	—	41	—	—	41	8	49
Shoubrahit ... ..	—	—	—	33	—	—	33	8	41
Edfina ... ..	—	—	—	44	—	—	44	6	50
Kom Hamada ... ..	—	—	—	40	—	—	40	9	49
El-Mahmoula ... ..	—	—	—	21	—	—	21	3	24
Dessouk ... ..	—	—	—	35	—	12	47	9	56
Mahalla-el-Kobra ... ..	—	—	—	114	—	—	114	13	127
Samannud ... ..	—	—	—	46	—	—	46	7	53
Tayeba ... ..	—	—	—	44	—	—	44	5	49
Sherbin ... ..	—	—	—	43	—	—	43	8	51
Zifta ... ..	—	—	—	45	—	—	45	11	56
Kafr-el-Sheikh ... ..	—	—	—	59	—	—	59	8	67
Fowa ... ..	—	—	—	32	—	—	32	6	38
Kafr-el-Zayat ... ..	—	—	—	40	—	—	40	6	46
Abshit... ..	—	—	—	—	—	—	—	—	—
Faraskour ... ..	—	—	—	31	—	—	31	10	41
Simbellawein ... ..	—	—	—	28	—	12	40	9	49
Manzala ... ..	—	—	—	35	—	—	35	9	44
Aga ... ..	—	—	—	52	—	—	52	10	62
Dikernes ... ..	—	—	—	46	—	8	54	11	65
Belbeis ... ..	—	—	—	36	—	—	36	8	44
Faqus ... ..	—	—	—	43	—	—	43	8	51
Minia-el-Kamh ... ..	—	—	—	34	—	—	34	8	42
Zawamel ... ..	—	—	—	—	—	—	—	—	—
Tala ... ..	—	—	—	42	—	—	42	10	52
Ashmoun ... ..	—	—	—	40	—	—	40	8	48
Menouf ... ..	—	—	—	64	—	—	64	11	75
Zawyet el Na'oura ... ..	—	—	—	24	—	8	32	6	38
Shebin el Kanater ... ..	—	—	—	39	—	—	39	7	46

TABLE NO. 57 (contd.)

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Staff Beds	Total No. of Beds
El-Arish ... ..	—	—	—	22	—	—	22	—	22
Sīwa ... ..	—	—	—	24	—	—	24	—	24
Saff ... ..	—	—	—	42	—	—	42	8	50
Ayat ... ..	—	—	—	62	—	—	62	18	80
Itsa ... ..	—	—	—	39	—	—	39	6	45
Wasta ... ..	—	—	—	38	—	—	38	9	47
Beba ... ..	—	—	—	47	—	—	47	10	57
Beri-Mazar ... ..	—	—	—	50	—	—	50	5	55
Fashn ... ..	—	—	1	40	—	—	41	9	50
Samalout ... ..	—	—	—	46	—	—	46	8	54
Deirout ... ..	—	—	—	42	—	—	42	10	52
Badari ... ..	—	—	—	31	—	—	31	7	38
Sahel Selim ... ..	—	—	—	24	—	8	32	8	40
Manfalout ... ..	—	—	—	40	—	—	40	6	46
Abutig... ..	—	—	—	38	—	—	38	9	47
Akhmim ... ..	—	—	—	28	—	12	40	7	47
Baliana ... ..	—	—	—	36	—	—	36	6	42
Gerga ... ..	—	—	—	39	—	—	39	9	48
Dishna... ..	—	—	—	33	—	—	33	9	42
Kous ... ..	—	—	—	22	—	12	34	10	44
Nag-Hamadi ... ..	—	—	—	42	—	—	42	10	52
Kom-Ombo... ..	—	—	—	25	—	—	25	6	31
Edfou ... ..	—	—	—	27	2	14	43	5	48
Eneiba... ..	—	—	—	11	—	—	11	1	12
El-Dirr ... ..	—	—	—	—	—	—	—	—	—
Baharia Oasis ... ..	—	—	—	8	—	—	8	—	8
Kharga Oasis ... ..	—	—	—	16	—	—	16	—	16
Dakhla Oasis ... ..	—	—	—	16	—	—	16	5	21
El Koseir ... ..	—	—	—	22	—	—	22	—	22
<b>TOTAL ... ..</b>	<b>35</b>	<b>44</b>	<b>13</b>	<b>5,395</b>	<b>59</b>	<b>184</b>	<b>5,730</b>	<b>933</b>	<b>6,663</b>



## Chapter XI.—OPHTHALMIC HOSPITALS

### *New Units.*

During this year, a permanent hospital was established at Tahta ; thus bringing the total of ophthalmic units to 99 of which 84 are permanent and 15 travelling.

### *1946-1947 Budget Proposals.*

The following units are proposed in the 1946-1947 budget :—

- 1.—A permanent ophthalmic hospital at Kaliub.
- 2.—An ophthalmic treatment centre accommodated in tents at Abu Kebir.

The extension of ophthalmic treatment centres to all parts of the country is being carried out gradually according to a prearranged plan, and subject to funds being made available.

### *Clinical Works.*

The following is a summary of the clinical work carried out during 1945 as compared with that of 1944 :—

TABLE No. 58.

	1944	1945
New patients ... ..	1,120,901	1,197,040
In-patients ... ..	32,390	35,858
Operations ... ..	244,026	250,355
Out-patients attendances ... ..	6,943,535	7,274,554

The number of patients who were found blind in one or both eyes, excluding cataract cases causing blindness, was 47,884, i.e. 3.7 per cent of the total patients examined at the ophthalmic hospitals. By adding the cataract cases causing blindness, the ratio becomes 3.9 per cent.

Acute ophthalmias represent 82 per cent of the causes of blindness.

The gonococcus is still the predominant etiological factor of acute ophthalmias ; its ratio to total micro-organisms being 39.5 per cent.

### *Ages of Patients.*

Of a total of 1,197,040 new patients treated, 102,764 or 8.6 per cent were under one year of age ; 378,399 or 31.6 per cent between one and 15 years ; 294,446 or 24.6 per cent between 16 and 30 years ; 672,845 or 56.2 per cent between one and thirty years of age.

This shows that the masses appreciate the importance of ophthalmic treatment for infants, children and youths.

### *Ophthalmic School Clinics.*

Ophthalmic clinics are at the present time provided in 36 Government primary schools in Cairo and the provinces. Of a total of 19,417 pupils examined, 97.1 per cent were found suffering from trachoma in its various stages. 14.7 per cent of these had trachoma in its most active stages, namely trachoma I and II ; but as a result of ophthalmic treatment, this latter ratio fell to about 4.3 per cent.

Besides, pupils of 78 other schools were examined and treated by medical officers of permanent or travelling ophthalmic hospitals in localities where these existed.



### *Other Services.*

Ophthalmic medical officers of this Ministry pay regular visits to other institutions and hospitals, namely :—

Leprosy Colony and Hospital at Abu Zaabel and Siufia.

Mental Hospitals at Abbassia and Khanka

Children Preventorium at Giza.

Children Preventorium at Zeitoun.

Children Dispensary at Mataria, Cairo.

Fever Hospitals at Abbassia and Embaba.

Convalescents Home and Children Preventorium at Marg, to examine and treat ophthalmic cases therein.

From time to time, ophthalmologists are also sent to Arish, Tor and the Oases for the examination and treatment of the inhabitants.

During Pilgrimage, ophthalmologists accompany the Medical Mission which is being sent every year to Hedjaz to examine and treat gratuitously pilgrims of all nationalities at Mecca and Medina.

Facilities are also given to ophthalmologists of other ministries and departments to attend the ophthalmic hospitals to increase their knowledge and practise in ophthalmic surgical technique.

Experienced ophthalmologists as well as trained attendants are detailed to ophthalmic units in other ministries and departments.

### *Accommodation.*

The number of beds in all ophthalmic units was 2,249. Steps are taken to increase in-patient accommodation in ophthalmic hospitals where space is available.

### *Post Graduate Course of Ophthalmology.*

Fresh graduates are annually given a Post Graduate Course in Medicine and Eye Surgery with a view to raising the standard of ophthalmology in Egypt.

This course commences in October and ends in April. Two examinations are held, the first in April and the second in November.

### *Sulphonamide Compounds.*

There is no question that inestimable progress has been achieved by the introduction of sulphonamide compounds in the treatment of eye diseases. These are now in general use in all ophthalmic units as a basic treatment and with very good results in acute inflammation, purulent ophthalmias, trachomatous corneal complications, acute dacryacystitis, panophthalmitis, orbital cellulitis, tenonitis, inflammation of the lacrymal gland, certain types of keratitis, abscess of cornea and dendritic ulcer.

### *Penicillin.*

Penicillin is also used by all the units in the treatment of such acute cases of purulent ophthalmias and other inflammation of the eye where the loss of sight or life is threatened.

### *Ophthalmic Library.*

There is a circulating ophthalmic library in Rod el Farag Ophthalmic Hospital for the benefit of all medical officers in ophthalmic units. It is supplied with old and new ophthalmic literature and placed at the disposal of all doctors with the object of keeping them thoroughly acquainted with recent advances and new progress in the ophthalmic field. Important books and references indispensable to junior medical officers are always provided in several copies to facilitate their circulation.

### *Modern Apparatus for Ophthalmic Hospitals.*

The Ministry continues to provide ophthalmic units with modern apparatus and instruments in order to keep pace with ophthalmic progress.

## Chapter XII.—PHARMACIES

### *Private Pharmacies.*

Eight permits for new private pharmacies were granted by the Ministry this year. Approval was given to the transfer of ownership of 11 pharmacies owned by non pharmacists to qualified pharmacists. This brings the total of pharmacies in operation throughout the country to 485.

### *Night Service Pharmacies.*

There were three night service pharmacies in operation this year as in the previous year. These dispensed 8,563 prescriptions, not including patented preparations which are dispensed without prescriptions.

### *Schedule IV Drug Stores.*

Seven permits were granted this year, five in Cairo and two in Alexandria.

### *Schedule I and II Drug Stores.*

One permit was granted this year in Zagazig.

### *Simple Drug Stores*

Seven permits for new simple drug stores were granted this year as follows : 1 in Damietta, 2 in Gharbia, 2 in Dakahlia, and two in Assiut.

### *Trading in Medicinal Plants.*

Two permits were granted in Alexandria for trading in medicinal plants.

### *Medical Practitioners who Prepare Drugs in their Clinics for their Private Patients.*

The medical practitioners who prepared drugs in their clinics for their private patients were as follows :—

4 in Kaliubia Province	4 in Giza Province
3 „ Menoufia „	1 „ Beni Suef „
3 „ Behera „	1 „ Fayoum „
1 „ Sharkia „	1 „ Minia „
1 „ Dakahlia „	2 „ Qena „
6 „ Gharbia „	1 „ Gerga „

### *Registration of Egyptian Specialities.*

215 permits for the preparation and sale of Egyptian specialities were granted during 1945, and 32 specialities were refused registration. This brings the total number of registered specialities to 1,370.

### *Commission Agents.*

17 permits for trading in drugs of schedules I and II were granted this year to Commission Agents, 2 permits for trading in substances of schedule III and 11 permits for drug depots.

TABLE NO. 57.—SHOWING QUANTITIES OF STUPEFACIENTS IMPORTED INTO EGYPT AND EXPORTED THEREFROM DURING 1945

Name of the Drug	Quantity Imported		Quantity Exported	
	Kg.	Gr.	Kg.	Gr.
Opium and its preparations ...	24	420	—	—
Morphine and its salts ... ..	—	631	—	—
Cocaine and its salts ... ..	—	266	—	—

QUANTITIES OF STUPEFACIENTS CONFISCATED FOR ILLICIT IMPORT OR EXPORT

Opium ... ..	2,105 kilos
Cannabis Indica ... ..	1,675 „
Cocaine ... ..	1 kilo

QUANTITIES OF STUPEFACIENTS CONSUMED FOR MEDICINAL PURPOSES

	Kg.	Gr.
Opium and its preparations ... ..	13	760
Morphine and its salts ... ..	—	911
Cocaine and its salts ... ..	—	955



## Part IV.—ENDEMIC DISEASES

### Chapter XIII.—ANCYLOSTOMA AND BILHARZIA

#### *New Units.*

The number of ancylostoma and bilharzia units remained the same as in the previous year, namely 94; no new units having been inaugurated this year. Some units have, however, been transferred from one locality to another. Certain mobile units have been permanently fixed. The object is to provide an ancylostoma and bilharzia unit to every principal district.

Herebelow are the details :—

No. 15 Ancylostoma Hospital was transferred from Bordein to Abshaway (Fayoum).

No. 18 Ancylostoma Hospital was transferred from Bagour to Sennouris (Fayoum).

No. 22 Ancylostoma Hospital was transferred from Tahanoub to Giza.

No. 24 Ancylostoma Hospital was transferred from Nikla el Enab to Teh el Baroud.

Mobile Ancylostoma Clinic No. 2 was transferred to Shabbas el Shohada.

Mobile Ancylostoma Clinic No. 3 was transferred to Samannoud.

Mobile Ancylostoma Clinic No. 4 was transferred to Qena.

No new in-patient departments have been provided this year. But the accommodation in the Endemic Diseases Hospital at Tewfikieh (Behera) was increased by 20 beds bringing the total to 40 beds.

Beds have also been provided in the following units for in-patients :—

6 beds in Ancylostoma Hospital No. 34 at Qena as from 12/10/1944.

12 „ „ Ancylostoma Hospital No. 10 at Quesna as from 5/6/1945.

8 „ „ Tanta Ancylostoma Hospital as from 7/8/1945.

4 „ „ Ancylostoma Unit No. 21 At Maghagha.

Beds have been reserved in general hospitals for the treatment of endemic diseases patients as follows :—

3 beds in Mehalla el Kubra Hospital.

2 beds in each of the general hospitals in the following towns :

Shebin el Kanatir—Sherbin—Dessouk—Taiba—Nabarouh—Kafr el Zayyat—Fowa—Kafr el Sheikh—Fariskour—Manzala—Sembellawein—Dilingat—Kafr el Dawar—Shubra-khit—Kom Hamada—Belbeis—Fakous—Mina el Kamh—Tala—Ashmoun.

This brings the total number of beds allocated for the treatment of endemic diseases in all the units to 153, distributed among 40 units.

#### *Treatment.*

The following are the details of treatment carried out during the year as compared with the previous year :—

	1945	1944
Number of new patients ... ..	1,016,957	1,043,218
„ „ injections given ... ..	1,800,868	3,423,332
„ „ Anthelmintic doses administered ... ..	182,334	289,340

In addition, some 51,492 pupils have been examined and treated besides members of other institutions, e.g. 600 Territorial Army men, 3,925 mental diseases patients, University students numbering 748, and children in the Agouza Foundlings Home.

#### *In-Patients.*

The following cases are accepted for in-patient treatment :—

- (1) Severe parasitic anaemia.
- (2) Dropsy and ascitis caused by hepatosplenomegaly and Egyptian splenomegaly.
- (3) Severe pellagra and its complications.
- (4) Severe amoebic dysentery.
- (5) Drug poisoning or complications thereof, e.g. tartar emetic and carbon tetrachloride.
- (6) Bilharzia in cases of asthma and heart diseases.
- (7) Severe parasitic infections in poor patients arriving from distant localities.

#### *New Drugs.*

Nicotinic acid has been used in the treatment of pellagra in daily doses of 0.1 gm. for seven days.

Iron concentrated mixture was used as a substitute for iron and arsenic mixture in the treatment of anaemia.

#### *Meals.*

Anaemic patients were provided with meals. Milk and meals were provided to pellagra patients.

#### *Prophylactic Measures :—*

A great propaganda campaign was launched against these diseases demonstrating their great danger to the public. The following means were utilised :—

- (1) Delivering lectures within the units.
- (2) Publication and distribution of pamphlets.
- (3) Creation of small museums.
- (4) Formation of local societies among the educated classes.
- (5) Organization of health fairs.
- (6) Formation of health societies among pupils.

#### *Compulsory Treatment.*

The Ministry is introducing compulsory treatment. This has been started in Fayoum Province. 72 villages with a population of 153,589 inhabitants have been treated during 1945.



## Chapter XIV.—MALARIA

Although the general ratio of positive malaria cases as shown by examination of blood specimens is higher this year than in the previous year, being 23·3 per cent as against 20·1 per cent in 1944, the number of malaria cases reported this year dropped from 256,078 in 1944 to 5,857 this year and the deaths from 1,881 to 56. This was the result of the termination of the malaria epidemic following the complete extermination of *A. gambia*.

### *Malaria Units.*

Table No. 60 shows all malaria stations in Egypt together with their outposts and the area covered by each in feddans.

### *Blood Specimens.*

Of a total of 63,988 specimens examined during the year, 14,906 were returned positive for either type of malaria (new and relapse) or a ratio of 23·3 per cent. Tables Nos. 61, 62 and 63 give the distribution of these specimens according to three categories of patients : (a) those attending malaria units, (b) those suspected in their homes, and (c) those undergoing general examinations in Lower Egypt, Upper Egypt and in both. It will be observed that the rate is highest in the first category and lowest in the last. This is explained by the fact that the patients who report to the malaria units are almost always suffering from malaria symptoms.

### *New Cases and Relapses.*

Table No. 63 shows that of the 14,906 positive malaria cases, 3,910 or 26·2 per cent were new and the rest relapsing.

Table No. 65 gives the number of specimens examined for malaria by the Fouad 1st Institute and Hospital for Tropical Diseases and which were received from various parts of Egypt. Table No. 66 shows the number of samples examined by malaria annexes in Ancylostoma hospitals. Table No. 67 shows cases of malaria and enlargement of spleen in 1945 distributed according to Upper and Lower Egypt.

### *Malaria Amongst Infants under one year of age.*

Table No. 64 gives general ratios of malaria amongst infants under one year of age. Malaria in this age group is always considered new.

### *Types of Malaria.*

Tables Nos. 68 and 69 show the incidence of the three types of malaria, benign, malignant and tertian, distributed according to governorates and provinces having malaria units, and the rate per cent of each type to total positive cases.

### *Monthly Distribution of Malaria.*

Tables Nos. 70 and 71 give the monthly distribution of all types of malaria. The former deals with Lower Egypt, the Canal and Suez Governorates and the Western Desert; and the latter deals with Upper Egypt, Frontier Districts and Southern Desert governorates.

The incidence of the benign type reached its peak during the months of June to October, the malignant type during July to November. Table No. 72 gives this distribution for all Egypt.

### *Incidence of Malaria in Governorates and Provinces during 1944-1945.*

As may be observed from table No. 73, these were 250,221 cases less this year than in the previous year. The deaths again show a decrease of 1,825. This is attributed to the termination of the Malaria epidemic in Qena and Aswan Provinces and the total extermination of *anopheline gambia*.



### *Mosquito Breeding Places.*

The malaria units and posts adopted the same methods as last year in detecting mosquito breeding places. Priority of disposal of these breeding places was in consideration of their danger as sources of malaria and bilharzia infection.

### *Control Measures.*

Both permanent and temporary measures were adopted this year as in previous years. A total of 5,165,891 kgs. of Paris Green and 133,460 kgs. of crude oil have been used for this purpose as shown in table No. 76. 161 birkas of a total of 123 acres, 10 karats and 5 sahms in area were filled in by the Dept. of Village Affairs during 1944—1945 as per table No. 77; and 17 birkas of a total area of 25 acres and 14 Sahms were filled in by Provincial Councils according to resolutions of the Anti-Mosquito Higher Board, as per table No. 78. 12 birkas of a total area of 12 acres, 9 karats and 23 sahms were filled in by the Egyptian Army as per table No. 79. 15 birkas with a total area of 49 acres, 4 karats and 2 sahms were filled in by the population in execution of Military Order No. 363 of 19/1/1943, as per table No. 80. Table No. 81 gives details of birkas to be filled in by the Dept. of Village Affairs during 1945-1946.

### *Warnings and Contraventions.*

Besides the foregoing control measures, malaria law No. 1 of 1926 was applied by the malaria units and posts. Warnings were served on offenders and contraventions drawn up for failure to remove the cause of the offence. Sentences were given ordering the Dept. of Village Affairs to undertake the removal of the cause of offence and debit the owners with the costs. Tables Nos. 82 and 83 give details of these warnings and contraventions for Upper and Lower Egypt.

### *Filariasis (Elephantiasis).*

Table No. 87 gives details of 162 specimens received during the year by the Research Institute for examination for Filariasis. 17 specimens or 10.4% were returned positive.

### *Treatment and Drugs.*

Drugs for the treatment of malaria were distributed following microscopical findings or clinical diagnoses; the same method of treatment was used as in previous years. Table No. 84 gives the distribution of drugs by malaria units in Lower and Upper Egypt. Tables Nos. 85 and 86 give details of inspection of breeding places throughout the Country.

### *Application of Malaria Law No. 1 of 1926.—Military Orders and Ministerial Arrêtés.*

Providing for the continuation of certain measures for protection of public health, Decree Law No. 108 of 1945 was published in the special edition of the Official Journal No. 45 (*bis*) dated October 6, 1945. Of the measures taken, those relating to malaria which were provided for in the following Military Orders :—

- (a) Military Order No. 115 dated January 13, 1941 (regarding anti-malaria measures in localities occupied by troops.)
- (b) Military Order No. 363 dated January 19, 1943, providing for the disposal of birkas, marshes and other mosquito breeding places.
- (c) Military Order No. 387 dated April 21, 1943, providing for certain malaria control measures.
- (d) Military Order No. 505 dated June 22, 1944, providing for certain malaria control measures.
- (e) Military Order No. 541 of December 12, 1944, regarding the drainage of miskas and cultivated lands in certain areas.
- (f) Military Order No. 549 dated December 19, 1944, relating to poison of pyrethrum and its extracts and trading therein.

### Ministerial Arrêtés

(a) Ministerial Arrêté dated June 24, 1945, amending Ministerial Order prohibiting rice and sugar cultivation around Inshass was published in the Official Journal No. 104 dated July 2, 1945.

(b) Arrêté dated July 10, 1945, prohibiting the cultivation of rice and other aquatic plants around Tolombat (Behera) was published in the Official Journal No. 113 dated July 19, 1945.

(c) Arrêté dated July 10, 1945, was published in the Official Journal No. 13 of July 19, 1945, prohibiting the cultivation of rice and sugar-cane and other aquatic plants round the valley area (Tel El Kebir) between Kilos 67 and Kassassin Aqueduct.

In the case of a. & b., article II of the arrêté provided that without prejudice to penalties provided for in Military Order No. 115, the Public Health Officials who have the character of Judicial Police Officers may remove the cause of the offence, including the removal of plants, if the offender fails to do so within a week from the date of the contravention.

#### *Propaganda.*

Propaganda was carried out in conjunction with the Health Propaganda Section with the same purpose as in previous years, namely instructing the masses in the symptoms of malaria, causes of its spread, means of infection and methods of treatment and protection.

#### *Complaints.*

All complaints received were dealt with and the causes of the complaints removed



TABLE NO. 60.—SHOWING PERMANENT STATIONS AND OUT-POSTS IN OPERATION DURING 1945  
A.—LOWER EGYPT

Province or Governorate	Permanent Stations or Travelling Hospital	Outposts	No, of zones	Area of each Zone in Feddans (Approx.)						Total Area
				1	2	3	4	5	6	
Canal ... ..	Ismailia ... ..	—	1	2640	—	—	—	—	—	2640
		Nafisha ... ..	1	2760	—	—	—	—	—	2760
		Wasfia... ..	1	4860	—	—	—	—	—	4860
		Abu Souer ... ..	2	3880	5240	—	—	—	—	9120
		El Dabia ... ..	1	3930	—	—	—	—	—	1930
		Ein Ghosein ... ..	1	3060	—	—	—	—	—	3060
		Sarabium ... ..	1	3780	—	—	—	—	—	3780
		Abu Sultan ... ..	1	2880	—	—	—	—	—	2860
		Port Said ... ..	1	3260	—	—	—	—	—	3260
										36290
	Suez ... ..	—	1	7800	—	—	—	—	—	7800
		El Koubri ... ..	1	3420	—	—	—	—	—	3420
		El Shalufa ... ..	1	3300	—	—	—	—	—	3300
									14820	
Damietta... ..	—	Damietta ... ..	3	1800	2200	2000	—	—	—	6000
Western Desert SouthernDesert.	Wadi el Natroun Kharga Oasis ... Dakhla Oasis ...	Same Procedure as in Gambia.								
Behera ... ..	Idku ... ..	—	2	2000	1800	—	—	—	—	3800
		El Montazah ... ..	1	2200	—	—	—	—	—	2200
		El Mamoura ... ..	1	3 00	—	—	—	—	—	3100
		El Tarhè ... ..	1	3 00	—	—	—	—	—	3200
		El Maadieh ... ..	1	2100	—	—	—	—	—	2100
										14400
	Kafr el Dawar	—								
		Khorshid ... ..	3	2400	1700	2200	—	—	—	6300
		Damanhour ... ..	1	1900	—	—	—	—	—	1900
		Teh el Baroud ... ..	4	2400	2500	2300	2420	—	—	9620
		Kom-Hamada ... ..	1	2700	(not in operation yet)				2700	
			1	2560	(not in operation yet)				2460	
									22980	
Gharbia ... ..	Desouk ... ..	—	5	1500	1260	1500	1440	1260	—	6960
		Abu-Ghinema ... ..	1	1929	—	—	—	—	—	1920
	Fowa ... ..	—	4	1440	1980	1980	330	—	—	5760
	Kafr el Sheikh ... ..	—	3	2400	2880	2220	—	—	—	7500
	Kallin ... ..	—	1	1980	—	—	—	—	—	1980
	Biala ... ..	—	3	1500	1330	2220	—	—	—	5100
	Sherbin ... ..	—	1	2220	—	—	—	—	—	2220
	El Zafaran... ..	—	2	3240	3000	—	—	—	—	6240
	Mehalla el Kobra ... ..	—	4	1680	1700	1700	1700	—	—	6780
									44460	
Menoufia ... ..	Shebin el Kom	—	4	1900	2100	2100	1950	—	—	8050



TABLE NO. 60.—SHOWING PERMANENT STATIONS AND-OUT POSTS IN OPERATION DURING 1945  
A.—LOWER EGYPT (continued)

Province or Governorate	Permanent Stations or Travelling Hospital	Outposts	No. of zones	Area of each Zone in feddans (approx.)						Total Area
				1	2	3	4	5	6	
Dakahlia... ..	Faraskour ... ..	—	3	2720	2420	3300	—	—	—	8440
	Dikerness ... ..	—	3	2460	2850	2400	—	—	—	7710
		Kafr Abu Nasr	2	960	900	—	—	—	—	1860
		El-Mansoura ... ..	3	3560	4800	4560	—	—	—	12920
		Beni Ebeid... ..	2	1140	1140	—	—	—	—	22 0
		Mit Ghamr... ..	2	1440	1200	—	—	—	—	2640
										<b>35850</b>
Sharkia ... ..	Belbeis ... ..	—	3	2160	1920	1980	—	—	—	6060
		Anshas ... ..	4	1200	1200	2100	1320	—	—	5820
		Faroukia ... ..	2	2520	1900	—	—	—	—	4420
		Tel el Kebir ... ..	1	3720	—	—	—	—	—	3720
	Abu Kebir ... ..	—	4	2010	1920	2070	2360	—	—	8360
		Kafr Sakr ... ..	2	1160	940	—	—	—	—	2100
		Faridia ... ..	1	2220	—	—	—	—	—	2220
										<b>32700</b>
Kaliubia ... ..	Toukh ... ..	—	3	2580	8020	2760	—	—	—	8160
		Benha ... ..	3	2340	2580	2880	—	—	—	7800
		Shebin 'el Kanatir	2	1440	1020	—	—	—	—	2460
		Kaliub... ..	2	1320	1200	—	—	—	—	2520
		Shoubra ... ..	2	1140	1200	—	—	—	—	2340
										<b>23280</b>
B.—UPPER EGYPT										
Giza .. ...	Giza ... ..	—	16	—	—	—	—	—	—	40020
		Kafr Ghatati ... ..	1	6720	—	—	—	—	—	6720
		Kafr Tohormos... ..	1	3840	—	—	—	—	—	3840
		Kafr Dahshour ... ..	1	6720	—	—	—	—	—	6720
										<b>51300</b>
Fayoum ... ..	Fayoum ... ..	—	4	2856	1420	2460	1320	—	—	8054
	Abshaway ... ..	—	3	2560	1800	2400	—	—	—	6762
										<b>14,816</b>
Beni Suef ... ..	Beni Suef ... ..	—	6	1680	1200	1080	1620	1260	970	7810
Minia ... ..	Minia ... ..	—	4	1750	1470	1560	1260	—	—	6700
		Abu Kirkas ... ..	3	780	510	960	—	—	—	2250
		Beni Mazar... ..	4	1080	1200	850	980	—	—	4110
		El Sheikh Fadl.	2	1200	840	—	—	—	—	2040
										<b>15,100</b>
Assiut ... ..	Manfalout ... ..	—	3	2460	3360	2580	—	—	—	8400

TABLE NO 61.—SHOWING DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN LOWER EGYPT AND THE GOVERNORATES OF CANAL AND SUEZ DURING THE YEAR 1945

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Patients visiting Stations and their Branches ... ..	55,543	3,545	8,466	12,011	33·8
(2) Suspected Cases from persons in their residence ... ..	3,681	16	343	479	13
(3) General examination ... ..	1,747	15	26	41	2·3
GRAND TOTAL ... ..	40,171	3,636	8,835	12,531	30·5

TABLE NO. 62.—SHOWING DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING THE YEAR 1945

Category	No. of Specimens	positive			
		New	Relapses	Total	%
(1) Patients visiting Stations and their Branches ... ..	6,453	193	1,472	1,665	25·8
(2) Suspected Cases from persons in their residence ... ..	821	2	68	70	8·5
(3) General examination ... ..	15,743	19	621	640	4
GRAND TOTAL ... ..	23 017	214	2,161	2,375	10 3

TABLE No.63.—SHOWING GENERAL DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN EGYPT DURING THE YEAR 1945

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Patients visiting Stations and their Branches ... ..	41,996	3,738	9,938	13,696	32·5
(2) Suspected Cases from persons in their Residence... ..	4,502	138	411	549	12·1
(3) General examination ... ..	17,490	34	647	681	3·8
GRAND TOTAL ... ..	63,988	3,910	10,996	14,906	23·3

TABLE NO. 64.—SHOWING MALARIA CASES FOR  
CHILDREN LESS THAN ONE YEAR ONLY IN LOWER  
AND UPPER EGYPT DURING THE YEAR 1945  
*Lower Egypt*

Province or Governorate	No of specimens	Positive	%
Canal ... ..	34	—	—
Western Desert ...	53	5	9·4
Behera... ..	161	46	25·4
Gharbia ... ..	322	90	28
Dakahlia ... ..	151	27	17
Sharkia ... ..	198	47	23·5
Kaliubia ... ..	28	5	18
<b>TOTAL ... ..</b>	<b>367</b>	<b>220</b>	<b>22·7</b>

*Upper Egypt*

Giza ... ..	2	2	100
Fayoum ... ..	313	52	16·6
Southern Desert ...	80	10	12·5
<b>TOTAL ... ..</b>	<b>395</b>	<b>64</b>	<b>16</b>

TABLE NO. 65.—SHOWING NUMBER OF SPECIMENS EXAMINED FOR MALARIA BY RESEARCH INSTITUTE  
DURING THE YEAR 1945

Categories	No. of Blood Specimens	Positive Malaria		Mixed	Total Positive	%
		Benign	Malignant			
(1) Specimens from Hospital...	7,699	477	138	3	618	8
(2) Specimens from Stations and Out Posts ... ..	57,734	6,457	870	13	7,340	12·7
(3) Specimens from Ancylos- toma Units ... ..	956	164	15	2	181	19



TABLE No. 66.—SHOWING NUMBER OF SPECIMENS EXAMINED BY MALARIA UNITS  
ATTACHED TO ANCYLOSTOMA HOSPITALS IN EGYPT DURING THE YEAR 1945

Ancylostoma Units	No. of Blood Specimens	Positive Malaria		Total Positive	%
		Benign	Malignant		
Suez ... ..	610	79	63	142	23·3
Desouk ... ..	4,500	1,162	152	1,314	29 2
Fowah ... ..	1,086	186	360	546	50·5
Kafr el Sheikh ... ..	4,686	1,240	202	1,442	30
Fayoum ... ..	3,404	1,239	318	1,557	45·7

TABLE No. 67.—SHOWING MALARIA AND SPLENIC ENLARGEMENT IN UPPER AND LOWER EGYPT DURING  
THE YEAR 1945

Province or Governorate	Locality	Persons not affected by Malaria			Persons affected by B.T. Malaria			Persons affected by M.T. Malaria		
		No.	Posit.	%	No.	Posit.	%	No.	Posit.	%
Western Desert ... ..	Wadi el Natroun ...	—	—	—	30	30	100	20	20	100
Minia ... ..	Minia ... ..	80	—	—	—	—	—	—	—	—
Sharkia ... ..	Belbeis ... ..	2,800	—	—	834	834	100	200	200	100
Gharbia ... ..	Bialla ... ..	895	37	7·1	377	172	45·6	32	17	53·1
	Kafr el Sheikh ...	159	6	3·7	1	1	100	—	—	—
Behera ... ..	Idku ... ..	1,885	104	5·5	1,508	133	8·8	148	16	10·8
	Kafr el Dawar ...	2,518	6	0·3	1,173	—	—	51	—	—
Southern Desert ... ..	Dakhla Oasis ...	—	—	—	369	82	22·2	154	26	16·8
TOTAL ... ..		8,337	153	1·8	4,292	1,252	29·1	605	279	46·1

Province or Governorate	Locality	Persons affected by Malaria		
		No.	Posit.	%
Southern Desert	Dakhla Oasis ...	1	—	—
	TOTAL ...	1	—	—

TABLE No. 68.—SHOWING NO. OF CASES ACCORDING TO MALARIA SPECIES IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES DURING THE YEAR 1945

Province or Governorate	Total of Speci- mens	Total of Positive Cases	%	Benign Tertian				Malignant Tertian				Quartan Malaria				Remarks			
				Benign Tertian			Posit. %	Malignant Tertian			No.	New	Relapses	%	No.		New	Relapses	%
				No.	New	Relapse Positive		No.	New	Relapses									
Canal ... ..	2,743	154	5.6	101	37	64	65.6	53	16	37	34.4	—	—	—	—	—	—	—	
Western Desert...	3,900	395	10.1	369	17	352	98.4	26	9	17	6.5	—	—	—	—	—	—	—	
Behera...	7,283	2,880	39.5	2,681	371	2,310	93	199	26	173	17	—	—	—	—	—	—	—	
Gharbia ... ..	9,416	3,566	37.8	2,077	572	1,505	58.2	1,489	71	1,418	41.8	—	—	—	—	—	—	—	
Dakahlia ... ..	8,413	2,692	32	2,567	2,171	396	95.5	125	20	105	41.5	—	—	—	—	—	—	—	
Sharkia ... ..	7,087	2,172	30.6	1,892	1,289	603	87.1	280	178	102	12.9	—	—	—	—	—	—	—	
Kaliubia ... ..	2,129	672	31	650	519	131	96.7	22	11	11	3.2	—	—	—	—	—	—	—	
Total Lower Egypt....	40,971	12,531	30.5	10,337	5,361	4,976	82.4	2,194	331	1,863	17.6	—	—	—	—	—	—	—	

TABLE No. 69.—SHOWING NO. OF CASES ACCORDING TO MALARIA SPECIES IN UPPER EGYPT AND THE GOVERNORATES OF SOUTHERN DESERTS DURING THE YEAR 1945

Province or Governorate	Total of Specimens	Total of Positive Cases	%	Benign Tertian			Posit. %	Malignant Tertian			Quartan Malaria			Remarks		
				No.	New	Relapses Positive		No.	New	Relapses	%	No.	New		Relapses	%
Giza ... ..	7,355	285	3.8	162	3	159	6.8	123	—	123	43.2	—	—	—		
Fayoum ... ..	7,149	1,439	20.1	879	52	827	61	558	58	500	38.7	2	—	2	0.1	
Minia ... ..	192	23	12	21	14	7	91	2	—	2	9	—	—	—		
Southern Desert ... ..	8,321	628	7.5	451	67	384	71.8	196	20	156	28	1	—	1	0.1	
Total Upper Egypt ... ..	23,017	2,375	10.3	1,513	136	1,377	63.7	859	78	781	36.1	3	—	3	0.1	

TABLE No. 70.—SHOWING MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND THE GOVERNORATES OF CANAL ZONE DISTRIBUTED THROUGHOUT THE MONTHS OF THE YEAR 1945

Month		Total of Specimens	Total of Positive Cases	%	BENIGN TERTIAN				MALIGNANT TERTIAN				REMARKS
					No.	New	Relapses	%	No.	New	Relapses	%	
January ...	... ..	1,962	332	16.8	212	54	158	10.6	120	21	99	6.5	
February...	... ..	1,891	231	12.1	146	36	110	7.7	85	12	73	4.4	
March ...	... ..	2,509	286	11.3	179	45	134	7.1	107	19	88	4.2	
April ...	... ..	1,992	527	26.4	359	93	266	18.0	168	11	157	8.4	
May ...	... ..	3,502	896	25.6	729	224	505	20.8	167	12	155	4.4	
June ...	... ..	3,940	1,607	40.7	1,371	424	947	34.7	236	26	210	5.9	
July ...	... ..	4,759	1,927	40.4	1,610	577	1,033	33.8	317	28	289	6.6	
August ...	... ..	5,638	2,080	37.0	1,719	585	1,134	30.6	361	39	322	6.3	
September	... ..	5,743	2,155	37.5	1,838	647	1,191	32.0	317	30	287	5.5	
October ...	... ..	4,993	1,599	32.0	1,427	523	904	28.5	172	77	95	3.4	
November	... ..	2,456	548	22.3	461	92	369	18.7	87	36	51	3.5	
December	... ..	1,566	343	21.8	286	65	221	18.2	57	20	37	3.6	
TOTAL		40,971	12,531	30.5	10,337	3,365	2,972	25.0	2,194	331	1,863	5.5	



TABLE No. 71—SHOWING MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATES DISTRIBUTED THROUGHOUT THE MONTHS OF THE YEAR 1945

Months	Total of Specimens	Total of Positive Cases	%	BENIGN MALARIA				MALIGNANT MALARIA				QUARTAN MALARIA				REMARKS
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%	
January ... ..	2,522	176	6.9	111	8	103	4.3	64	10	54	2.5	1	—	1	0.05	
February ... ..	2,598	122	4.5	68	1	67	2.2	53	9	44	2.04	1	—	1	0.8	
March ... ..	2,632	117	4.3	97	2	95	3.6	29	1	19	0.7	—	—	—	—	
April ... ..	3,166	72	2.2	58	3	55	1.8	14	1	13	0.4	—	—	—	—	
May ... ..	2,494	124	4.9	100	9	91	4	24	5	19	0.9	—	—	—	—	
June ... ..	1,022	110	10.6	87	5	82	8.5	23	1	22	2.2	—	—	—	—	
July ... ..	1,002	162	16.1	114	8	106	11.3	88	3	45	4.7	—	—	—	—	
August ... ..	1,571	260	16.5	145	18	127	9.2	115	16	99	7.3	—	—	—	—	
September ... ..	1,697	310	24.1	169	15	154	9.9	141	12	129	8.3	—	—	—	—	
October ... ..	1,843	341	18.5	170	20	150	9.2	171	17	145	9.2	—	—	—	—	
November ... ..	1,404	351	25	238	19	219	16.9	113	2	111	8.04	—	—	—	—	
December ... ..	1,066	230	21.5	156	28	128	14.5	73	1	72	6.8	1	—	1	0.4	
TOTAL ... ..	23,017	2,375	10.3	1,513	136	1,377	6	859	78	781	4.3	3	—	3	0.12	

TABLE No. 72.—SHOWING MALARIA CASES ACCORDING TO SPECIES IN EGYPT DISTRIBUTED THROUGHOUT THE MONTHS OF THE YEAR 1945

Month	Total of Specimens	Total of Positive	%	Benign Tertian				Malignant Tertian				Quartan Malaria				Remarks
				No.	New	Relapse	%	No.	New	Relapse	%	No.	New	Relapse	%	
January ... ..	4,504	508	11·2	323	62	261	7·1	184	31	153	4·08	1	—	1	0·02	
February ... ..	4,489	353	7·8	214	37	177	4·7	138	21	117	3·09	1	—	1	0·02	
March ... ..	5,141	403	7·8	276	47	229	5·3	127	20	107	2·4	—	—	—	—	
April ... ..	5,158	599	11·6	417	96	321	8·06	182	12	170	3·5	—	—	—	—	
May ... ..	5,996	1,020	17·1	829	233	596	13·8	191	17	174	3·2	—	—	—	—	
June ... ..	4,962	1,717	34·6	1,458	429	1,029	29·3	259	27	232	5·2	—	—	—	—	
July ... ..	5,761	2,089	36·2	1,724	585	1,139	29·9	356	81	334	6·3	—	—	—	—	
August ... ..	7,209	2,340	32·4	1,864	603	1,261	25·8	476	55	421	6·6	—	—	—	—	
September ... ..	7,440	2,465	33·1	2,007	662	1,345	26·8	458	42	416	6·2	—	—	—	—	
October ... ..	6,836	1,940	28·3	1,597	543	1,045	23·3	343	94	249	5·01	—	—	—	—	
November ... ..	3,860	899	23·3	699	111	588	18·2	200	38	162	5·1	—	—	—	—	
December ... ..	2,632	573	21·7	442	93	349	16·7	139	21	109	4·8	1	—	1	8·04	
TOTAL ... ..	36,988	14,906	23·3	11,850	3,501	8,349	18·5	3,053	409	2,644	4·6	3	—	3	0·004	

TABLE No. 73.—SHOWING NUMBER OF NOTIFIED MALARIA CASES AND  
DEATHS DURING THE YEARS 1944 AND 1945

PROVINCE OR GOVERNORATE	1944		1945		Difference		Relapses Malaria 1945	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cairo ...	734	22	267	11	— 467	— 11	145	—
Alexandria	458	22	221	4	— 167	— 18	—	—
Other Governorates	987	10	758	9	— 229	— 1	193	—
Behera ...	536	2	1,438	1	— 902	— 1	130	1
Gharbia ...	189	2	851	3	— 662	— 1	2,459	—
Dakahlia...	121	4	573	7	— 452	— 3	52	—
Menoufia...	25	2	23	—	— 2	— 2	2	—
Sharkia ...	497	1	553	2	— 56	— 1	34	—
Kaliubia ...	889	2	489	—	— 400	— 2	9	—
Giza... ...	121	—	44	—	— 77	—	—	—
Fayoum ...	513	6	484	1	— 29	— 5	381	—
Beni-Suef	66	3	43	2	— 23	— 1	2	—
Minia ...	105	2	15	—	— 90	— 2	—	—
Assiut ...	36,961	6	13	1	— 36,948	— 5	24,921	—
Gerga ...	19,281	5	6	2	— 19,275	— 3	22,201	—
Qena ...	164,463	1,396	6	8	— 164,457	— 1,358	62,243	16
Aswan ...	30,132	396	3	5	— 30,129	— 391	26,785	2
<b>TOTAL ...</b>	<b>256,078</b>	<b>1,881</b>	<b>5,857</b>	<b>56</b>	<b>— 250,221</b>	<b>— 1,835</b>	<b>141,557</b>	<b>19</b>



TABLE No. 74.—SHOWING NO. OF VILLAGES INSPECTED AND BIRKAS HARBOURING EITHER LARVAE OF ANOPHELES, CULEX PIPPIENS OR BILHARZIAL SNAILS IN LOWER EGYPT AND CANAL ZONE DURING THE YEAR 1945.

Province or Governorate	Station	No. of Villages inspected	No. of Birkas examined	Birkas free of larvæ		Birkas harbouring Anopheles Larvæ						Birkas Harbouring					
				No.	Rate %	Pharoen.		Multicolor		Sergenti		Other Species		Bilharz. Snails		Culex Pipiens	
						No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %
Canal ... .. {	Ismailia ... ..	8	319	147	46	172	56	38	12	79	25	97	30.4	—	—	—	—
	Suez ... ..	3	77	77	100	—	—	—	—	—	—	—	—	—	—	—	—
Western Desert... ..	Baharia Oasis ... ..	1	9	—	—	1	11.1	2	22.2	6	66.6	—	—	—	—	—	—
Behera ... ..	Kafr el Dawar ... ..	8	8	5	62.5	3	6	—	—	—	—	—	—	—	—	—	—
Gharbia ... .. {	Desouk ... ..	10	20	—	—	6	30	11	55	—	—	1	5	—	—	—	—
	Fowah ... ..	1	13	—	—	13	100	—	—	—	—	—	—	—	—	—	—
	Kafr el Sheikh ... ..	2	7	5	71.4	1	20	—	—	—	—	1	20	—	—	—	—
	Biala ... ..	6	9	9	100	—	—	—	—	—	—	—	—	—	—	—	—
Dakahlia... .. {	Faraskour ... ..	4	6	3	50	11	33.3	—	—	—	—	—	—	—	—	—	—
	Dekernis ... ..	14	26	26	100	—	—	—	—	—	—	—	—	—	—	—	—
Sharkia... .. {	Belbeis ... ..	16	39	—	—	36	82	5	13	—	—	6	16	—	—	5	19
	Abu Kebir ... ..	2	7	—	—	6	35	—	—	—	—	—	—	—	—	3	43
	Inhas ... ..	1	17	—	—	7	41	8	47	—	—	2	11.7	—	—	—	—
Kaliubia ... ..	Toukh ... ..	46	108	31	29.6	45	41.6	30	27	—	—	—	—	—	—	—	—
Total ... ..		122	665	303	45.5	291	43.7	94	14	85	12.7	107	16	—	—	8	12

TABLE No. 75.—SHOWING No. OF VILLAGES INSPECTED AND BIRKAS HARBOURING OTHER LARVA OF ANOPHELES, CULEX PIPIENS AND BILHARZIAL  
SNAILS IN UPPER EGYPT AND FRONTIER ZONE DURING THE YEAR 1945

Province or Governorate	Station	No. of Villages inspect- ed	No. of birkas examin.	Birkas free of Larva		Birkas Harbousing Anopheles Larva						Birkas Harbousing			
				No.	%	Pharos.		Multic.		Sergenti		Other Species		Bilharz. Snails	
						No.	%	No.	%	No.	%	No.	%	No.	%
Southern Desert...	...	4	12	2	16.6	1	8.3	1	8.3	6	50	—	—	—	—
Giza ...	...	76	321	78	24.3	49	15.2	1	0.3	—	—	—	—	198	61.6
Fayoum ...	Fayoum ...	7	14	2	14.2	5	35.7	11	78.5	2	14.2	—	—	—	—
	Abshaway ...	10	12	2	16.6	1	8.3	2	16.6	5	41.6	—	—	—	—
Minia ...	Minia ...	5	1	—	—	1	10	—	—	—	—	—	—	—	—
TOTAL ...		102	360	84	23.3	57	15.8	15	4.1	13	3.6	—	—	198	55

TABLE No. 76.—SHOWING QUANTITIES OF PARIS GREEN  
AND MAZUT CONSUMED THROUGHOUT THE YEAR 1945

District	Province or Governorate	Station	Paris Green in Kilograms	Mazut in Kilograms
Lower Egypt ...	Canal ... ..	Ismailia ... ..	393,937	7,789
		Suez ... ..	94,220	12,441
	Western Desert	Baharia Oasis ..	33,750	—
		Wadi El Natroun	—	—
	Behera ... ..	Idku ... ..	207,370	4,013
		Kafir el Dawar...	960,730	2,617
	Gharbia ... ..	Dessouk ... ..	144	1,125
		El wa ... ..	65,500	—
		Kafir El Sheikh...	173,400	—
		Biala ... ..	11,150	6,300
	Dakahlia ... ..	Faraskour... ..	530,086	8,414
		Dekernis ... ..	252	939
	Sharkia ... ..	Abu Kebir ... ..	245	700
		Anshas ... ..	19	200
		Belbeis ... ..	134,500	1,480
	Kaliubia ... ..	Toukh ... ..	268	—
TOTAL ... ..			3,575,711	46,048
Upper Egypt ...	Southern Desert	Kharga Oasis ...	300	2,400
		Dakhla Oasis ...	105,126	645
	Giza ... ..	Giza ... ..	200	84,367
	Fayoum... ..	Fayoum ... ..	423,750	—
		Abshaway... ..	200	—
	Minia... ..	Minia... ..	361,240	—
	TOTAL ... ..			1,590,110
GRAND TOTAL...			5,165,891	133,460



TABLE NO. 77.—DETAILS OF BIRKAS FILLED-IN BY THE VILLAGE AFFAIRS DEPARTMENT  
DURING 1944-1945

Locality	No. of Birkas	Approximate Area			Remarks
		Sahm	Kirat	Feddan	
Birkas in Zagazig Bandar ... ..	5	10	—	2	
„ Pyramids street in Giza	19	12	23	15	
„ Fayoum Bandar ... ..	6	25	17	8	
„ Assiut Bandar ... ..	19	16	10	15	
„ Gerga Bandar ... ..	4	15	22	—	
„ Tahta Bandar ... ..	6	16	13	6	
„ Balyana Bandar ... ..	8	8	3	2	
„ Qena Bandar ... ..	5	16	18	5	
„ Luxor Bandar ... ..	1	20	6	—	
„ Kous Bandar ... ..	20	9	19	11	
„ Isna Bandar ... ..	6	—	7	15	
„ El Buselia Bahari and Kebli and Kelh Gharb, Idfu Markaz... ..	25	12	17	23	
„ El Ramadi Kebli, Markaz Idfu ... ..	11	17	7	9	
„ Dishna Bandar ... ..	16	—	9	5	
<b>TOTAL ... ..</b>	<b>161</b>	<b>5</b>	<b>10</b>	<b>123</b>	

TABLE NO. 78.—DETAILS OF BIRKAS FILLED-IN DURING 1944-1945 BY PROVINCES IN CONFORMITY WITH  
DECISIONS OF THE TEMPORARY HIGHER BOARD FOR EXTERMINATION OF MOSQUITO BREEDING PLACES

Province	Markaz	Locality	No. of Birkas	Approximate Area			Remarks
				Sahm	Karat	Feddan	
Menoufia ...	Quesna ...	Minshat Sabri ...	8	21	9	23	
Beni Suef ...	El Wasta ...	Tansa el Malak...	4	5	22	—	
Assiut ... ..	Mallawi ...	Tenda ... ..	1	—	1	—	
	Akhmim ...	Ahawa... ..	—	—	—	—	
Gerga ... ..	Gerga ... ..	Gerga Bandar ...	4	12	15	—	
	Sohag ... ..	Sohag Bandar ...	—	—	—	—	
<b>TOTAL ...</b>			<b>17</b>	<b>14</b>	<b>—</b>	<b>25</b>	

TABLE No. 79.— BIRKAS FILLED-IN DURING 1944—45 BY THE EGYPTIAN ARMY

Locality	No of Birkas	Approximate Area			Remarks
		Sahm	Karat	Feddan	
Luxor Bandar ... ..	4	8	—	9	
El Karnak ... ..	7	11	21	2	
Nagah el Toad (El Bairat)	1	4	12	—	
TOTAL ... ..	12	23	9	12	

TABLE No. 80.— BIRKAS FILLED-IN BY THE INHABITANTS DURING 1945 UNDER PROVISIONS OF MILITARY ORDER No 363 ISSUED ON 19/1/1943

Locality	No of Specimens	Approximate Area			Remarks
		Sahm	Karat	Feddan	
Ismailia (Canal) ... ..	9	—	4	19	
Dikernis (Dakahlia) ... ..	3	—	12	8	
Fayoum ... ..	3	2	12	1	
TOTAL ... ..	15	2	4	29	

TABLE NO. 81.—BIRKAS THE FILLING-IN OF WHICH HAS BEEN CONTRACTED BY THE VILLAGE AFFAIRS DEPARTMENT DURING 1945-1946

Province or Governorate	Markaz	Locality	No. of Birkas	Approximate Area			Remarks
				Sahm	Karat	Feddan	
Behera ... ..	Kafr el Dawar ...	Kafr el Dawar Bandar.	1	—	12	1	
	„ ...	Abu Kir ... ..	1	—	—	11	
	Damanhour ...	Damanhour Bandar	11	17	8	11	
	Shubrakhit ...	Shubrakhit Bandar	8	4	2	5	
	Kom Hamada ...	Kom Hamada Bandar	1	21	6	2	
		TOTAL ... ..	22	18	5	31	
Dakahlia ... ..	Aga ... ..	El Eraka ... ..	4	18	11	5	
	Aga ... ..	Aga Bandar ... ..	6	18	4	9	
	Aga ... ..	Shenshona ... ..	3	22	7	6	
	Mit Ghamr... ..	Mit Ghamr Bandar ...	4	—	4	9	
	„ ... ..	El Faramawi ... ..	1	7	6	7	
	Sembellawin ...	Sembellawin Bandar	6	7	7	4	
	El Manzala ...	Manzala Bandar ...	2	—	5	10	
	„ ... ..	Mataria ... ..	1	—	22	1	
	Dekernis ... ..	Dekernis Bandar ...	4	1	2	2	
	„ ... ..	Negir ... ..	2	—	12	5	
	Faraskour ... ..	El Serw ... ..	2	16	18	5	
	„ ... ..	El Zarka ... ..	2	—	—	2	
		TOTAL ... ..	37	17	5	69	
Sharkia ... ..							
	Minia el Kamh.	Minia el Kamh Bandar	1	13	9	1	
	„ ... ..	El Azizia ... ..	6	13	20	3	
	Belbeis ... ..	Belbeis Bandar ... ..	5	5	15	44	
		TOTAL ... ..	12	7	21	49	



TABLE No. 81 (Continued)

Province or Governorate	Markaz	Locality	No. of Birkas	Approximate Area			Remarks
				Sahm	Karat	Feddan	
Kaliubia ... ..	Benha ... ..	Benha Bandar ... ..	11	15	17	17	
	,, ... ..	Esnit ... ..	3	—	6		
	Kaliub... ..	Sandabis ... ..	5	23	15	4	
	,, ... ..	Mit Halfa ... ..	7	16	23	1	
	Sub-Cairo ... ..	Bahtim ... ..	11	22	4	10	
		TOTAL ... ..	37	4	20	35	
Menoufia ... ..	Quesna ... ..	El Magabra ... ..	4	—	5	5	
	Shebin El Kom ...	Shantana el Hagar ...	6	20	2	7	
	Shuhada ... ..	Denshay ... ..	4	17	14	1	
	Menouf ... ..	Souk-el Dahak ... ..	3	20	5	1	
	,, ... ..	El Bagour ... ..	6	8	12	10	
	Ashmoun ... ..	Shema ... ..	5	17	17	2	
	,, ... ..	El Ghatamna ... ..	2	2	11	2	
		TOTAL ... ..	30	12	21	30	
Giza ... ..	Giza ... ..	Helwan ... ..	8	20	17	4	
	,, ... ..	Helwan El Balad ...	1	11	10	1	
	,, ... ..	Badrashin ... ..	4	21	15	17	
	Imbaba ... ..	El Mansouria ... ..	1	6	16	1	
	,, ... ..	Birak El Kiam ...	8	1	1	5	
		TOTAL ... ..	22	11	13	30	
Beni Suef ... ..	Wasta ... ..	Beni Ada ... ..	27	5	2	10	
	Beni Suef ... ..	Beni Suef Bandar ...	32	11	4	9	
		TOTAL ... ..	59	16	6	19	

TABLE No. 81 (Continued)

Province or Governorate	Markaz	Locality	No. of Birkas	Approximate Area			Remarks
				Sahm	Karat	Feddan	
Minia ... ..	Minia ... ..	El Bergaya ... ..	2	9	12	1	
	„ ... ..	Saft el Hadar ... ..	6	5	13	2	
	Beni Mazar ...	El Fashn ... ..	22	11	17	21	
		TOTAL ... ..	30	1	19	25	
Assiut ... ..	El Badari ... ..	El Matammer ... ..	19	—	4	17	
		El Gharib ... ..	8	2	23	7	
		El Louka ... ..	2	—	18	2	
		El Oana ... ..	14	23	9	26	
		El Sahel ... ..	10	7	21	12	
		Nazlet el Malek ...	2	22	18	—	
		El Shamia ... ..	2	2	1	—	
		Sheikh Shihata ...	3	3	17	—	
		El Akadra ... ..	7	9	7	2	
		Yout ... ..	2	—	8	—	
		El Nawamis ... ..	3	3	17	—	
		Nazlet Anan ... ..	8	16	3	4	
		Tasa ... ..	9	5	2	2	
	Abnoub ... ..	Basra ... ..	26	—	10	7	
	Assiut ... ..	El Zawia ... ..	5	12	20	6	
		El Motia ... ..	11	11	6	7	
		Kirkarias ... ..	2	23	14	—	
		Shatb ... ..	3	8	3	1	
		El Naaisher and Awlad					
		Meki ... ..	19	21	20	8	
		Awlad Ibrahim ...	6	1	18	4	
		Mousha ... ..	19	19	3	14	
		Abu Tig ... ..	8	21	5	5	
		Nazlet Bakour ...	3	3	21	5	
		TOTAL ... ..	111	21	18	140	

TABLE No. 81 (Continued)

Province or Governorate	Markaz	Locality	No. of Birkas	Approximate Area			Remarks
				Sahm	Kirat	Feddan	
Gerga ... ..	Akhmim ... ..	Akhmim Bandar ...	14	15	18	7	
	Gerga ... ..	Gerga Bandar ... ..	5	9	11	1	
		TOTAL ... ..	19	00	16	9	
Fayoum ... ..	Fayoum ... ..	Fayoum Bandar ...	3	4	11	2	
	,, ... ..	El Lahon ... ..	2	9	7	2	
	Abshaway ... ..	El Shawashna ... ..	1	3	5	—	
	Sennouris ... ..	Matartaris ... ..	2	1	7	1	
		TOTAL ... ..	8	17	14	6	
Gharbia ... ..	Bilkass ... ..	Bilkass Bandar ...	13	12	9	9	
	Zifta ... ..	Zifta Bandar and Kafr Anan ... ..	9	17	18	6	
	Tanta ... ..	Tanta Bandar ... ..	2	2	9	1	
		TOTAL ... ..	24	7	13	17	
	GRAND TOTAL	NO. OF LOCALITIES : 78	421	11	8	4	



TABLE NO. 82.—SHOWING NO. OF WARNINGS AND P.Vs. OF CONTRAVENTION DRAWN BY MALARIA  
UNITS AND THEIR BRANCHES IN LOWER EGYPT AND CANAL ZONE DURING THE YEAR 1945

Province or Governorate	Unit	Burrow pits or Puddles		Filling or covering disused wells or sakias and abolishing pumps		Clearing drains or Miskas		Clearing ponds or marshes		Prohibition of rice or sugar-cane cultivation	
		Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.
Kaliubia ...	Toukh ..	12	9	52	6	—	—	—	—	—	—
Sharkia ...	Inshas ...	—	—	2	—	—	—	—	—	—	2
	Abu Kibir ...	—	—	—	—	1	—	—	—	—	—
Dakahlia ...	Dekernis ...	—	—	5	—	5	—	—	—	18	12
	Faraskour ...	—	—	—	—	5	—	—	—	—	—
Gharbia ...	Bialla ...	—	—	—	—	146	—	—	—	—	—
	Kafr el Sheikh ...	—	—	4	—	—	—	—	—	—	—
Behera ...	Dessouk ...	—	—	—	—	2	—	—	—	—	—
	Kafr el Dawar ...	—	—	—	—	238	74	—	—	—	75
Canal ...	Idku ...	—	—	—	—	138	92	—	—	66	14
	Suez ...	—	—	—	—	3	3	—	—	—	—
	Ismailia ...	10	1	—	—	72	10	10	—	—	1
	TOTAL ...	22	10	63	6	630	179	10	—	84	104

TABLE NO. 83 — SHOWING NO. OF WARNINGS AND P.Vs. OF CONTRAVENTION DRAWN BY MALARIA  
UNITS AND THEIR BRANCHES IN UPPER EGYPT AND FRONTIER ZONE DURING THE YEAR 1945

Province or Governorate	Unit	Burrow Pits or Puddles		Filling or Covering disused wells or sakias and abolishing pumps		Clearing drains or Miskas		Clearing ponds or marshes		Prohibition of rice or sugar-cane cultivation	
		Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	P.Vs.	Ws.
Fayoum ...	Abshaway ...	2	—	—	—	10	—	13	—	—	—
	Fayoum ...	—	4	—	—	6	—	—	—	1	5
Giza ...	Giza ...	—	—	59	6	—	—	—	—	—	12
Southern Desert	Kharga Oasis	1	—	2	—	—	—	2	2	—	—
	TOTAL ...	3	4	61	6	16	—	15	2	1	17

TABLE NO. 84.—SHOWING TOTAL QUANTITIES OF MAIN DRUGS DELIVERED  
FOR TREATMENT DURING THE YEAR 1945

Kind of drug	Lower Egypt	Upper Egypt	Total
Atebrine ...	201,171	61,616	262,787
Quinine (5 grains)...	1,854	6,302	8,156
„ (2 „) ...	1,707	2,767	7,474
„ (Chocolte) ...	1,445	7,785	8,830
Plasmochine Comp. (1 Cgm.) ...	7,425	2,190	9,615
„ „ (0.5 Cgm.)...	8,964	701	9,665
Plasmochine (Simple) ...	578	8	586
Mabakrin ...	13,633	—	13,633

TABLE NO. 85 —SHOWING NO. OF EXAMINATIONS OF DIFFERENT BREEDING PLACES IN LOWER EGYPT  
AND CANAL ZONE DURING THE YEAR 1945.

Province or Governorate	Unit	Burrow-Pits	Railway Ditches	Unburnt Brick Puddles	Wells and Sakias	Drains	Canals & Irrigation Water courses	Ponds	Marshes	Rice Cultivation	Sugar Cane Cultivation	Samar Cultivation
Canal ... ..	Ismailia ... ..	83	39	—	—	332	34	409	2	—	—	—
	Suez ... ..	—	1	—	—	16	3	—	—	—	—	—
Western Desert...	Baharia Oasis ...	—	—	—	2	18	1	9	—	33	—	—
	Wadi el Natrun ...	—	—	—	—	—	—	—	—	—	—	—
Behera ... ..	Idku ... ..	623	—	—	—	14,06	4,994	59	291	—	—	—
	Kair el Dawar ...	9	14	—	3	17	7	6	—	1	—	1
	Descuk ... ..	5	6	—	—	2	7	18	4	7	—	—
Gharbia ... ..	Fowa ... ..	8	—	—	—	4	1	7	—	6	—	—
	Kafr el Sheikh ...	1	5	—	—	170	25	27	2	13	—	—
	Biala ... ..	1	—	—	—	85	48	—	1	25	—	—
Dakahlia ... ..	Faraskour ... ..	116	—	—	—	1,01	631	—	68	15	—	—
	D kernis ... ..	—	—	—	—	27	3	—	—	8	—	—
	Abu Kebir ... ..	6	3	—	1	6	11	4	—	—	—	—
Sharkia ... ..	Belbeis ... ..	2	1	—	—	12	—	37	—	1	—	1
	Inshas ... ..	—	—	—	—	40	2	19	—	—	—	—
Kaliubia ... ..	Toukh... ..	8	20	—	—	16	15	50	4	4	—	—
TOTAL ... ..		862	89	—	6	16,202	2,182	1,182	372	113	—	2

TABLE. No.85.—SHOWING NO. OF EXAMINATIONS OF DIFFERENT MOSQUITO BREEDING PLACES IN  
UPPER EGYPT AND FRONTIER ZONE DURING THE YEAR 1945.

Province or Governorate	Unit	Burrow-Pits	Railway Ditches	Unburnt Brick Puddles	Wells and Sakias	Drains	Canal & Irrigation Water Courses	Ponds	Marshes	Rice Cultivation	Sugar Cane Cultivation	Samar Cultivation
Southern Desert {	Kharga Oasis ...	—	—	—	—	5	—	—	—	7	—	—
	Dakhla Casis ...	—	2	—	—	7	—	12	7	17	—	—
Gerga ... ..	Gerga ... ..	6	5	—	—	73	26	26	—	12	—	—
Fayoum ... ..	Fayoum ... ..	143	364	80	—	1,361	360	889	—	—	—	—
	Abshaway... ..	24	—	—	—	84	1	11	—	—	—	—
Minia ... ..	Minia ... ..	56	—	—	—	2	19	1	—	—	—	—
TOTAL ... ..		229	371	80	—	1,535	406	939	7	—	—	—

TABLE NO. 87—SHOWING THE RESULTS OF BLOOD SPECIMENS  
EXAMINED FOR FILARIA BY RESEARCH INSTITUTE DURING 1945

	No. of Specimens	Positive	%
Result of positive specimens in all different parts of Egypt }	162	17	10.4



## Chapter XV.—GAMBIA

The year 1945 marked the final phase in the fight against *A. gambiae*. By the end of February of that year, no trace of the mosquito was to be found anywhere. Nevertheless, control and treatment activities continued without any relaxation until the complete eradication of the mosquito was ensured. Only then was all control work stopped with the exception of a few measures.

### *Eradication of A. gambiae.*

During January, only 37 *darakat* (zones) out of the 641 *darakat* which constituted the infested area were positive for either adult or larvæ. The infested *darakat* were located at Tahta, Mataana, Sebaieh, Edfu, Silwa-Sarrag, Kom Ombo, Iqlit, Dirr and Balana from north to south.

During February, only three *darakat* were positive : Two at Kom Ombo-Iqlit and one at Edfu. The last larva was found on the fifth of February in a seepage water near El Gabal Canal at Manshiet Bahari village in zone 12 at Kom Ombo. The last adult *A. gambia* was caught in the home of Hefni Mohamed Ahmed in Mostagaddah village in zone 89 at Kom Ombo.

Since then, No *A. gambia* was met again inspite of continued surveys.

### *Survey Work.*

This work was divided into two completely separate divisions each with special personnel, namely :

- (i) Larvæ Survey.
- (ii) Adult mosquito survey.

### *Larvæ Survey*

Larvæ survey is the classical method for locating a particular species. It was employed in the early days of the epidemic to locate mosquito breeding places in localities hitherto unknown to be infested. These were carefully surveyed.

Later on when control work was established everywhere, larvæ survey was done to check on the work of paris greeners.

Table No. 93 gives the number of larvæ surveyors during 1944, as at the end of each month. It is clear that the number was small in the beginning but increased in proportion with the number of paris greeners.

After February 1945, larvæ survey was done for another far important object. This was to ascertain the complete eradication of the species. Hence, it was necessary to increase the number of larvae surveyors during that year.

During the spread of *A. gambiae*, the number of collected larvæ was considered an indication to the effectiveness of larvicidal work. After eradication of the species, it became necessary to adopt a new measure. The number of anopheline larvæ collected, specially *A. pharoensis*, was then adopted. Chart No. (1) shows the number of larvæ collected weekly by larvae surveyors during the latter half of 1944 and during 1945. The weekly fluctuations appearing on the chart are not only the result of the changing number of surveyors, but also of other factors, namely, the variation in the number of breeding places, the efficiency of control work and, above all, the breeding seasons. Besides demonstrating the positive aspect of larvæ survey, the Chart also demonstrates the negative aspect which is by no means less important.



Chart No. (2) shows the number of units surveyed weekly for larvæ during 1945. A standard unit is five linear or square metres except wells and *sakias* which represent separate units. Unfortunately, compilation of data was not complete during the first quarter of the year. As from the 14th week, the data became complete. Hence the chart shows fully the efforts spent in searching for larvæ. The curve here shows less fluctuations than in chart No. 1 except when it rises to about double its former level following the suppression of control work and increasing the number of larvae surveyors or slightly drops during weeks with less than six working days because of official holidays.

### Adult Mosquito Survey

Though adult mosquito survey is more accurate than larvæ survey in determining the relevant species, it is more laborious and is, in consequence, not applied except in special circumstances. Thus no systematic survey for adult mosquitoes was organised during the early years of the campaign. Only sporadic adult captures were done. This was however somewhat expanded during the last quarter of 1944.

With the commencement of 1945, steps were taken to organise a regular survey of adult mosquitoes, beginning with a few posts and later gradually increased. Shortly after the complete eradication of *A. gambiae*, adult mosquito survey went hand in hand with larvæ survey throughout the field as another means of control of the effectiveness of eradication.

Table No. 94 shows the number of adult mosquito surveyors as at the end of each month during 1945. They had started with 84 surveyors in January, and reached 336 surveyors at the end of September.

Chart No. 3 gives the number of houses surveyed weekly. The figures speak for themselves and demonstrate the negative and positive phases of adult mosquito survey.

It is worthy of mention that while adult mosquito survey is an accurate method of locating mosquitoes in general, it is more so in the case of *A. gambiae* since it is a domestic species spending all its life in dwellings and especially in bed rooms.

### Spread of Malaria.

The following table No. 88 gives the official figures of malaria cases and deaths during 1945 distributed quarterly, for the four southern provinces :—

TABLE No. 88

Quarter	Aswan		Qena		Gerga		Assiut	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1st ... ..	3	3	1	1	4	0	6	1
2nd ... ..	1	0	1	0	2	0	7	0
3rd ... ..	1	0	0	0	0	0	0	0
4th ... ..	0	0	0	0	2	2	0	0
<b>TOTAL ... ..</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>13</b>	<b>1</b>

This shows that only 28 cases of malaria and 7 deaths were recorded throughout the once infested area.

### Quarantine Measures.

The same quarantine measures as in previous years were maintained. These were intended to guard against the re-introduction of *A. gambiae*.

#### 1.—Quarantine Service :

The negotiations which were proceeding with the Sudan Government were concluded in 1945 by setting up a Quarantine Office at Khartoum directed by a senior Egyptian medical officer. One of the duties of this office was to see that aircraft proceeding to Egypt were disinfested immediately before departure.

## 2.—The Neutral Zone.

This zone was originally created to prevent the penetration of *A. gambiæ* from the infested area in the south to the clear area in the north. During 1945, the neutral zone was used for a reverse purpose, namely, to prevent the escape of other species of anopheline from the northern areas where they were prevalent to southern areas where their numbers have been reduced to a minimum.

The spraying with paris green did not only affect the *A. gambiæ* but also the other species of anopheline. Hence these species were found in only 62 *darakat* (zones) during July and in 53 *darakat* during August out of a total of 641 *darakat* constituting the infested area. Most of these *darakat* were located in the northern provinces : 45 were in Assiut and Suhag. The remainder were located in the southerly provinces.

Since larvicidal work in Assiut and Suhag was by no means less effective than the work carried out in the southerly provinces, it can be safely concluded that the diverse species found in the former were carried by the wind or other means from the northern areas through the neutral zone. It was therefore decided in June to enlarge the neutral zone to comprise 61 *darakat* in Abnoub and Manfalout districts to the north of Assiut. This arrangement did not, however, last long as it was abolished in October with other larvicidal work for technical reasons. Thus from a larvæ control point of view, as from the first week of October there existed no neutral zone between the once infested area and the clear area.

## 3.—Disinfestation of Means of Transport.

Whenever signs of eradication of *A. gambia* became apparent in a locality, mosquito control measures in respect of means of transport were gradually stopped. Thus disinfestation of railway coaches was suspended at Edfu and Gerga in January, and at Beni Suef in April. Disinfestation of motor transport was suspended at Afwa (Beni Suef) in January. On the 29th November 1945 disinfestation of all means of transport was stopped in all the existing eight posts, with the exception of the post at Aswan Dam. There, disinfestation of all river craft arriving from the south and bound northwards was maintained as a permanent measure to prevent a second invasion of *A. gambiæ* from the Sudan.

The following table No. 89 gives the number of the various means of transport disinfested monthly during 1945 and the quantities of pyrethrum solution used for the purpose :—

TABLE No. 89

Month	Railway Coaches	Motor- cars	Boats	Air craft	Insecticide consumed (litre)
January ... ..	9,334	6,779	1,972	58	1,190
February ... ..	4,499	4,538	2,171	43	826
March ... ..	4,142	4,712	2,950	42	847
April ... ..	3,724	5,951	3,960	58	766
May ... ..	2,904	4,730	4,569	38	640
June ... ..	2,877	1,498	3,700	37	61
July ... ..	3,389	1,764	4,838	46	754
August ... ..	2,736	1,346	3,592	41	644
September ... ..	3,057	1,682	2,740	42	637
October ... ..	3,627	2,857	4,804	91	797
November ... ..	3,047	2,127	3,422	99	564
December ... ..	—	—	252	—	9
TOTAL ... ..	43,336	73,984	38,970	595	8,285



#### 4.—D.D.T. Spray-painting.

The spray-painting of inner surfaces of railway coaches with D.D.T. and Kerosene solution which was started in December 1944, was continued during January 1945 until all coaches running on the Upper Egypt line were all spray-painted. Every coach was marked with the date of painting and no coaches were allowed to run on this line except those painted. Measures were taken to re-paint every three months.

During February, the spray-painting of the 15 aircraft belonging to Misr Airways was complete. These were the only aircraft in use for internal aerial transport between Cairo and Upper Egypt.

During the same month, a post for spray-painting river craft with the same solution was set up at Assiut. The work was, however, stopped a week later for fear of fire or explosion of kerosene vapour accumulating in the closed bottom of boats. D.D.T. dissolved in water was the only answer to avoid that risk. But this was not forthcoming because no dissolvent was available. As a result of negotiations with the Sudan Government, it was agreed to spray-paint Sudanese railway Nile boats sailing between Halfa and Shellal with D.D.T. kerosene solution instead of pyrethrum solution hitherto in use. This work was started in September when a spray-painting post was installed at the landing place on the eastern bank of the Nile at Shellal.

The following table No. 90 gives the number of the different means of transport spray-painted with D.D.T. solution during 1945, and the average quantity of D.D.T. solution in cubic centimetres required to spray-paint a square metre.

TABLE No. 90

Month	Railway coaches	Nile boats at Assiut	Nile steamers at Shellal	Average consumption in cubic centimetres
January ... ..	82	—	—	25·0
February... ..	—	63	—	130·5
April ... ..	214	—	—	37·3
May ... ..	126	—	—	27·1
September ... ..	—	—	10	30·0
October ... ..	—	—	8	20·0
November ... ..	—	—	4	24·3
December ... ..	—	—	16	19·7
TOTAL ... ..	422	63	38	

#### Larvicidal Work.

The routine dusting with paris green as a larvicide was continued during 1945 despite the disappearance since February of *A. gambiae*. According to principles of eradication, control measures must be maintained at the highest possible standard during the period when the climate is unfavourable for mosquito breeding. Larvicide was thus used regularly once a week till the 30th August when all control measures were stopped to check for complete eradication of *A. gambiae*.

Malariol in stock was used during January, February and March in spraying *sharias* and disused wells. Since then, malariol was never used in eradication.



The following table No. 91 gives the quantities of larvicides used and the number of Parisgreeners as at the end of each month during 1945. No survey work was done during the control period (September, October and November). The surveyors shown during these months were kept standing by in case of re-appearance of *A. gambiae*.

TABLE No. 91

Month	Consumption of P.G. in tons	Consumption of malariol in tons	Number of Parisgreeners
January ... ..	12.0	4.75	869
February ... ..	10.6	0.50	869
March ... ..	9.4	0.70	823
April ... ..	8.9	—	833
May ... ..	9.2	—	876
June ... ..	10.0	—	983
July ... ..	11.1	—	1012
August ... ..	8.4	—	1015
September ... ..	1.7	—	215
October ... ..	0.2	—	181
November ... ..	0.0	—	180
December ... ..	0.0	—	000

The monthly variations in quantities of larvicide are due to seasonal changes of water collections.

Dusting with Paris green was stopped on 30th August. The small amounts shown during September and October were used in the neutral zone and breeding places of other species of anopheline in the hope of eradicating simultaneously *A. gambiae* and the other species. This was however found impracticable and apt to prejudice *gambiae* eradication control. It was therefore stopped altogether as from the first week of October.

#### *Eradication Control.*

It is easy to prove the presence of any insect by simply searching for and finding its. The result is positive and final. But it needs persuasive evidence and precaution to pronounce a negative result. Thus the following methods of control were adopted as from August 30, when it became clear that *A. gambiae* was eradicated :—

(1.) All routine larvicidal work was stopped throughout the once infested area. This was meant to provide any *gambia* mosquito that might have escaped the large scale survey work carried out from February to the end of August, the opportunity to propagate freely.

(2.) The months of September, October and November, being the most favourable season for the propagation of *A. gambiae* in Egypt, were chosen for carrying out control tests. Moreover, favourable breeding places are left behind by the Nile flood which occurs at the same period.

(3.) Survey work was intensified to a maximum. Table No. 94 shows that the number of larvæ and adult surveyors increased greatly after August. In fact all Paris green overseers, controllers, supervisors and heads of posts who were kept standing by after dusting with paris green was stopped, were engaged in survey work. About 1200 men in all were engaged in searching for *A. gambia* between Assiut in the north and Ballana in the south. Not a single *A. gambiae* was encountered during the months of September, October and November. In view of the evidence which will be summed up herebelow it was safe to declare the result as negative.

(i) Between 300,000 and 400,000 units were surveyed weekly. The unit is five linear or square metres. A well or *sakia* is considered a unit whatever its area. Chart No. 2 gives the weekly number of units surveyed during 1945.

(ii) Between 200 and 2,500 collections of anopheles larvæ were made weekly. A collection means all the larvae collected from one unit whatever number it may contain. Chart No. 1 shows the number of collections of anopheles larvæ collected and diagnosed in the Section's laboratory and the percentage of *A. gambiae* therein. It shows clearly the absence of *A. gambiae* since February 1945 in spite of the increased number of other anopheles after routine dusting with paris green was stopped at the end of August and despite the increased number of surveyors.

(iii) Between 50,000 and 70,000 houses were surveyed weekly. Chart No. 3 gives the number of houses surveyed weekly during 1945.

(iv) The number of adult anopheline mcsquito collections captured during the control period. The following table No. 92 gives details of these collections :—

TABLE No . 92

Month	Number of collections		Number of Imago	
	T tal	Gambiae	Total	Gamliae
September ... ..	107	Nil	290	Nil
October ... ..	2,115	Nil	4,095	Nil
November ... ..	1,355	Nil	2,851	Nil
<b>TOTAL ... ..</b>	<b>3,577</b>	<b>Nil</b>	<b>7,036</b>	<b>Nil</b>

(v) Different teams of surveyors checking the work of each other at different times. Thus the zone surveyors would carry regular routine surveys which are checked by the controllers, supervisors and chiefs of posts. The work was again checked by the station survey squads headed by the supervisors and chiefs of stations. There were two other teams belonging to Field Headquarters in Assiut who carried out a final checking. Besides, there were two British Army survey units who reported directly to the Minister of Public Health on the progress of the eradication campaign.

(vi) It is to be remembered that all surveyors were daily paid and received exceptionally high wages. There were also some three thousand daily paid men in the gambiæ Eradication Service all of whom were quite aware that if no gambiæ mosquitoes were captured until the end of November, the campaign would be closed and they would in consequence lose their jobs.

#### *Termination of Eradication Work.*

In view of the above significant findings, approval of the higher authorities was obtained for the liquidation of the Gambiæ Eradication Service. All field work was stopped on November 29, 1945, and liquidation of the campaign followed immediately.

#### *Credits.*

Anti-gambiæ expenditures during the early part of 1945 were met from the half million pound credit granted in November of the previous year.

A credit of L.E. 275,000 was provided in the 1945/1946 budget for the relief of destitute persons in Qena and Aswan provinces and for eradication work. A further sum of L.E. 4,000 from funds of the Higher Malaria Commission was allocated for gambiæ eradication work. In October 1945, an additional credit of L.E. 260,000 was approved for the continuation of the fight against A. gambiæ and malaria.

#### *Privileges for Gambiæ Eradication Personnel.*

The same privileges were accorded to the staff this year as in 1944, namely:—

- (1) An allowance of 50% of the salaries and wages to all field workers.
- (2) An allowance of 50% of the infection allowance to personnel on field duty.
- (3) Travelling by the 1st Class of personnel of the 5th and 6th grades.



The following privileges were further accorded this year :—

(1) Granting of special increments of salaries for distinguished personnel. Letters of appreciation to be kept in personal files of staff. Medical officers to have priority in educational missions.

(2) Payment of overtime to all personnel of Head Office, Cairo, who received no compensation for their hard work during the campaign.

(3) Award of a memorial medal to all who participated in the Gambia Campaign and decorations to distinguished staff.

#### *Post Eradication.*

#### *Liquidation of the Campaign.*

Following the closing down of field work on November 20, 1945, arrangements were made for all daily paid personnel—with the exception of a small number required to undertake the liquidation—to proceed on their holidays prior to their release from service. As soon as the services of those retained were dispensed with, they too were allowed to proceed on their holidays and then discharged.

Officials delegated from other sections of the Ministry were returned to their posts as soon as their services were no longer required.

The liquidation process went smoothly from the small unit upwards. First the *darakat* (zones) were liquidated, then the posts, stations and lastly the areas. As most of the office accommodation was rented, all leases were terminated at the end of December. Certain few offices were handed over to other units of the Ministry.

By the end of December, the number of personnel remaining in service was 384 as compared with 2,449 at the end of November.

#### *Precautionary Measures.*

Now that gambia is eradicated from Egypt, it is only wise to anticipate the possibility of a re-invasion. A state of vigilance must, therefore, be maintained until it is ascertained that the north of the Sudan is definitely free from *A. gambiae*. It was thus decided to continue certain eradication measures, namely :—

(1) Disinfestation of aircraft on departure from Khartoum and again on arrival at the Egyptian aerodromes.

(2) Periodical spray-painting with D.D.T. of all steamers and boats traversing the Nile between Wadi Halfa, Shellal and Aswan, and re-painting within three months.

(3) Routine larva and adult survey in Nubia to be carried out at least four times a year.

(4) Routine larva and adult survey must be undertaken for yet another year to ensure complete eradication, as in the case of Brazil where eradication was achieved for the first time in history.

The first of these measures is undertaken by the Quarantine Department. A gambia service has been set up to carry the other measures.

#### *Liquidation of other activities.*

Following the declaration that *A. gambiae* was completely eradicated from Egypt, not only eradication measures were liquidated but also all other activities connected with mosquito control.

The treatment service was terminated and the 80 medical officers and other permanent staff attached thereto were returned to their original duties in the other sections of the Ministry. The temporary staff numbering 1,168 and consisting of 20 supervisors, 117 surveyors, 856 overseers, 55 labourers and 120 drivers and mechanics were gradually released.

Relief work undertaken by the Ministry of Supply and ladies of the Mohamed Ali Foundation and the Red Crescent Society was also terminated.



TABLE No. 93 —LIST OF THE PERSONNEL DURING THE YEAR 1944

Month	Doctors	Engineers	Supervisors	Controllers	paris-greener		Surveyors		Clerks etc.	Lab urers. etc.	Total
					Larvæ	Imago	Larvæ	Imago			
January ... ..	18	4	—	16	162	82	12	—	31	596	921
February ... ..	19	4	—	20	149	77	12	—	32	637	950
March ... ..	29	4	—	30	179	55	14	—	36	887	1,934
April ... ..	33	4	—	35	263	63	22	—	35	1,163	1,618
May ... ..	36	4	—	43	308	35	27	—	41	1,454	1,948
June ... ..	43	4	—	72	482	40	30	—	47	2,071	2,789
July ... ..	43	10	—	91	653	59	34	—	58	2,900	3,848
August... ..	41	14	—	107	546	60	46	—	64	2,393	3,271
September ... ..	48	14	4	155	767	60	105	—	71	2,036	3,260
October ... ..	48	17	5	173	804	150	128	—	136	1,861	3,322
November ... ..	52	19	6	189	900	191	147	—	133	2,121	3,758
December ... ..	53	22	6	200	889	141	210	—	141	1,909	3,511

N.B.—Figures from 1st July represent eradication personnel only. Treatment personnel being separated from that date

TABLE No. 94.— LIST OF THE PERSONNEL DURING THE YEAR 1945

Month	Doctors	Engineers	Supervisors	Controllers	Paris-greeners		Surveyors		Clerks etc.	Labourers, etc.	Total
					Larvæ	Imago	Larvæ	Imago			
January ... ..	43	23	11	203	869	41	180	84	139	1,745	3,338
February ... ..	44	23	14	207	869	58	205	130	141	1,718	3,409
March ... ..	45	22	16	229	823	43	247	276	156	1,840	3,697
April ... ..	44	34	23	237	838	39	254	382	136	1,896	3,783
May ... ..	44	31	23	254	876	39	272	304	139	1,961	3,943
June ... ..	44	32	22	281	983	37	301	308	142	1,985	4,125
July ... ..	42	43	25	287	1,012	37	374	302	172	1,946	4,180
August ... ..	40	42	26	302	1,015	36	331	294	174	1,932	4,182
September ... ..	39	37	24	300	*315	36	352	336	172	1,127	2,738
October ... ..	36	35	23	291	*181	32	363	324	166	1,049	2,500
November ... ..	30	34	22	290	180	31	365	320	163	1,014	2,449

\*These Parisgreeners were kept standing-by for time of need and were employed in survey and in eradication.

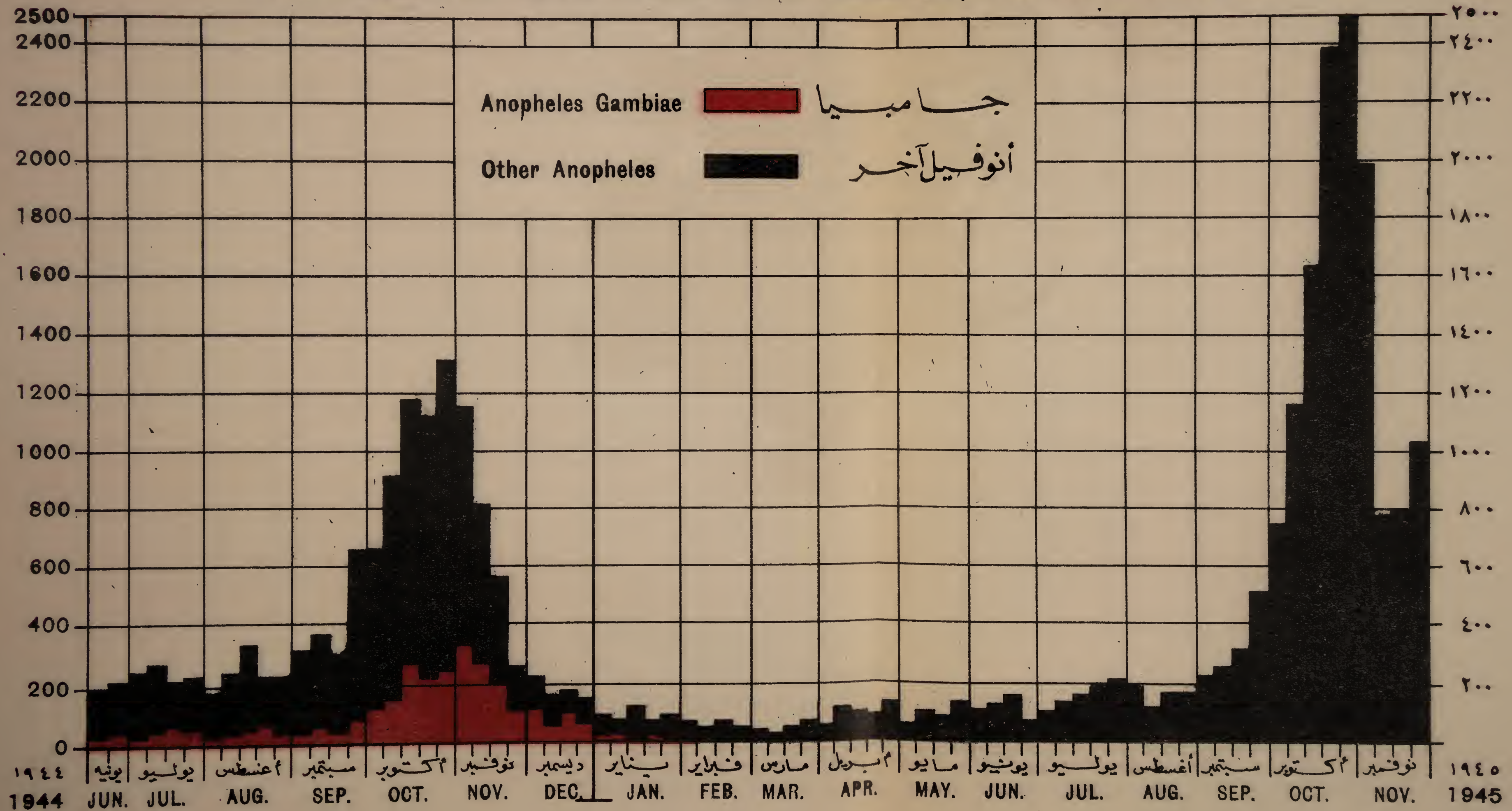


Chart 1

لوحة رقم ١

عدد عينات يرقات الأنوفيل بأنواعه التي شخّصت مجهرياً بالمعمل

NUMBER OF COLLECTIONS OF ANOPHELES LARVAE IDENTIFIED MICROSCOPICALLY AT THE GAMBIAE ERADICATION SERVICE LABORATORY BY WEEKS. JUNE 1944 TO NOVEMBER 1945







Months.	عدد المشتغلين		Week No.	No. of units of breeding places surveyed.	عدد وحدات أماكن التوالد المستكشفة
	مراقبين	كشافين			
Jan.	192	180	1-5	86,254	81,254
Feb.	196	205	6-9	92,360	92,360
March	218	247	10-13	144,721	144,721
April	238	254	14-18	256,178	256,178
May	264	272	19-22	218,482	218,482
June	281	301	23-26	216,186	216,186
July	387	314	27-31	250,391	250,391
Aug.	302	321	32-35	248,385	248,385
Sept.	310	557	36-39	249,503	249,503
Oct.	291	544	40-44	247,093	247,093
Nov.	290	545	45-48	260,914	260,914

البيانات كاملة منذ الأسبوع ١٤

Reporting complete in and after week 14.

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3 days week.

البيانات غير متكاملة

Reporting-incomplete.

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أوقفت جميع أعمال الحقل بقسم استئصال الجذام في ٢٩ نوفمبر ١٩٤٥ عند نهاية الأسبوع ٤٨

(١) يشرف المراقبون على ملاحظتي أخضر باريس ويقضون معظم وقته في الاستكشاف عن البرقات

(٢) كشاف البرقات يقضون كل وقهم في الاستكشاف عن البرقات ليس إلا

*All the field work of the Gambiæ Eradiction Service was discontinued on 29 November 1945, at the end of week 48.*

(1) Foremen of Paris green Mulahezín, who spend much of their time searching for larvae.

(2) Larvae scouts, who spend all their time searching for larvae.

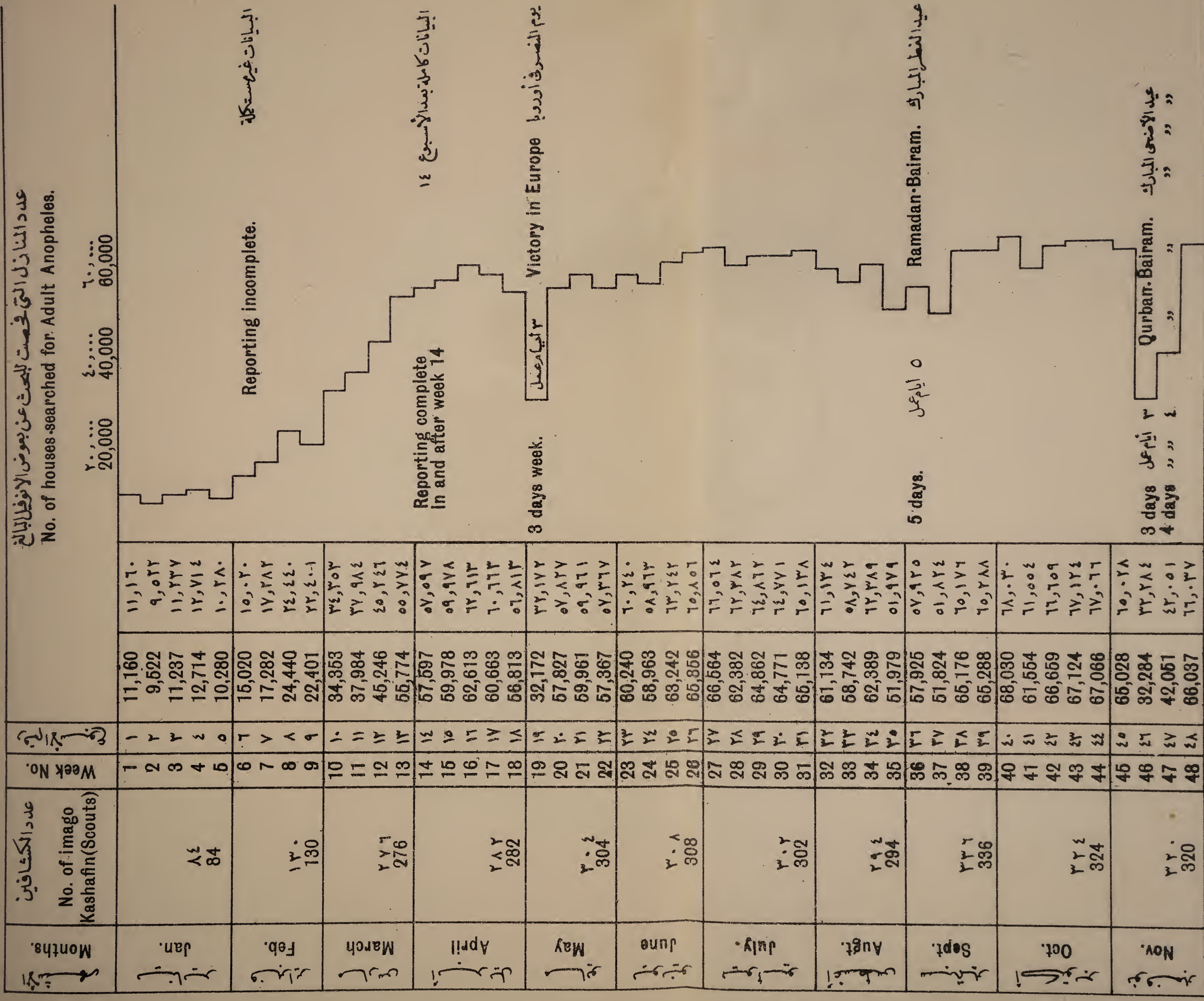






# الاستقصاء عن بعوض الأنوفيل البالغ الذي قمار به قسم استئصال الجامبيا ١٩٤٥

SURVEYS FOR ADULT ANOPHELES — BY THE GAMBLAE ERADICATION SERVICE 1945.



All of the field work of the Gambiae Eradication Service was discontinued on 29-November 1945, at the end of week 48.





## Chapter XVI. — BILHARZIA SNAIL DESTRUCTION

### *Introduction.*

During the year 1944-1945 the Section has continued its control work in Fayoum Province, Giza Province and Dakhla Oasis and also extended its activities to Aswan Province.

The work of the Section being correlated to seasonal and biological factors, the beginning of our working year falls in April, the end of a full year's work falling into the next calendar year.

### *Progress of the Campaign in Fayoum Province.*

The work in this Province is progressing satisfactorily in spite of certain difficulties of survey and treatment. Due to agricultural reasons many valuable months are lost each year when it is not possible to obtain either permission from the Irrigation Department or the consent of cultivators to close canals for clearance or sulphation. In order to meet our schedule of covering all areas twice a year, our divisions were reorganized and 18 main areas comprising 51 units of work were established.

Table No. 95 illustrates the yearly extension of our work, the proportional reduction in the number of infested streams as well as the reduction of snails in infested canals since the beginning of our work in the Fayoum.

TABLE NO. 95.—MAIN SURVEYS IN FAYOUM PROVINCE

Year	Number of streams		Comparative Ratio	Lengths infested in Kms.	No. of Bulinus in 100 dips.
	Surveyed	Infested			
1942 ... ..	27,370	6,806	25%	4,618	—
1943 ... ..	45,234	5,318	12%	3,588	—
1944 ... ..	92,241	7,263	8%	3,009	32
1945 ... ..	139,723	5,706	4%	4,365	20

### *Progress of the Campaign in Giza Province.*

Owing to the subdivision of main areas, reorganization and improved transport facilities, all field operations were more closely checked and controlled. Only canals showing an infestation rate of over 8 snails in 100 dips were treated and the rest were watched until infestation rose. The treatment of drains was restricted to those near villages or those harbouring snails infested with schistosomes.

The Nile was surveyed on both banks throughout the Province but in 214 kilometres of bank only 36 snails were found, and those all in pockets containing vegetation.

The results of two years work in the Province are given in Table No. 96 and it will be seen that, as in the Fayoum, the number of streams covered in our surveys has increased with a corresponding proportional reduction in the number of streams infested, while the number of snails found in infested streams has fallen markedly.

TABLE NO. 96.—MAIN SURVEYS OF CANALS IN GIZA PROVINCE

Year	Number of streams		Comparative Ratio	Length infested in Kms.	No. of Bulinus in 100 d ps.
	Surveyed	Infested			
1943 ... ..	4,111	1,616	39%	1,743	63
1944 ... ..	10,934	2,040	19%	1,455	42
1945 ... ..	12,950	2,001	15%	1,777	20



### *The Campaign in Dakhla Oasis.*

A survey was made of all water sources for infestation with *Bulinus truncatus* snails, the vectors of human Bilharziasis, and *Limnaea cailliaudi* snails, the vectors of liver fluke in cattle. From 644 wells examined, 77 wells in the northern and eastern part of the Oasis were found infested (12%). The infestation is heavy except in Rashda, where several snail eradication campaigns have been conducted in the past. All infested streams were treated and no schistosome dermatitis has been noted since.

It is estimated that about 1,500 persons are infested with schistosomiasis. 3,243 samples of urine from various villages were examined and 97 samples or 3% were infested with schistosome eggs.

### *Extension to Aswan Province.*

Conforming to our 6-year plan which proposes to cover the whole of the Egyptian territory starting up-river and working down to the Mediterranean, we have made a general survey of the whole Province.

*The Area above the Dam.*—Many snails were found in Nubia, in the irrigation projects as well as in the Nile, and schistosomiasis is widespread. The eventual treatment of this region will best take place at the beginning of the summer when the water falls with the opening of the dam, but will be left until communications improve.

*The Area below the Dam.*—It is known that the lands near Kom Ombo and Edfu have become centres of schistosomiasis (80%) since their conversion from basin irrigation to perennial irrigation. The new permanent canals, which mostly terminate in blind ends and never drain completely, afford ideal breeding places for such snails as are introduced from the Nile. All agricultural land and the islands were surveyed and our survey showed that the large streams of the areas under perennial irrigation were very heavily infested with snails while the distributaries of Edfu area dry up between rotations and are free from snails.

TABLE NO. 97. — FIRST SURVEY IN ASWAN PROVINCE

Area	Surface in Feddan	Population	No. of Streams		Comparative ratio	Length infested in Kms.
			Surveyed	Infested		
Kom Ombo and Environment	41,124	60,974	3,283	392	12%	470
Edfu and Environment	25,722	121,882	6,751	132	2%	407

Kom Ombo and Edfu areas proper, which are more heavily infected than the surrounding areas are now under treatment.

## Chapter XVII.—LEPROSY

Sixteen years ago this Ministry began the anti-leprosy campaign. The first leprosy unit was opened in Cairo in March 1929. It was originally an out-patient clinic for detection and treatment of lepers. An in-patient section was later annexed to that clinic for the isolation of lepers requiring hospital treatment.

Out-patient leprosy clinics have since been set up in the chief towns of provinces with branch clinics to serve surrounding districts.

Since the isolation of lepers requires special colonies where lepers receive treatment and lead a normal life away from society, the construction of a leprosy colony at Abu Zaabal was begun in 1930. It was preliminarily opened for the accommodation of male lepers in mid 1933.

The anti-leprosy campaign was administratively under the supervision of the Endemic Diseases Section. With the increase of leprosy units, however, it was decided in 1937 to divorce leprosy work from the Endemic Diseases Section and create a separate section under the title "Leprosy and Tuberculosis Control Section," hitherto also a branch of the former section. Later on, this new section had to undergo a farther separation for, in November 1940, it was decided to split it into two sections; and since that time leprosy has become the responsibility of the Leprosy Section.

Lists of patients attending leprosy units show that the disease is evenly distributed throughout the country.

The following table No. 98 shows the leprosy units, their branches and the number of positive cases recorded by them since the beginning of leprosy control.

TABLE No. 98.

Year	No. of Lepers	No of Branches	No of new Patients	N. of Positives
1929 ... ..	1	—	394	208
1930 ... ..	3	—	1,015	433
1931 ... ..	5	—	1,472	588
1932 ... ..	5	4	1,287	486
1933 ... ..	6	8	1,639	744
1934 ... ..	6	8	1,273	618
1935 ... ..	6	10	1,083	584
1936 ... ..	6	12	1,031	726
1937 ... ..	6	15	1,759	888
1938 ... ..	9	15	2,171	1,097
1939 ... ..	10	21	2,198	1,059
1940 ... ..	10	33	2,298	995
1941 ... ..	10	38	1,387	728
1942 ... ..	10	37	1,586	825
1943 ... ..	10	37	1,488	771
1944 ... ..	10	37	1,372	672
1945 ... ..	10	37	1,234	738
	—	—	24,687	12,160



## LEPROSY UNITS.

Besides Abu Zaabal Colony where male lepers are isolated and Cairo Hospital where female lepers are temporarily isolated, there are 8 out-patient clinics, details of which are given below :—

	Out-Patient Clinic	Date inaugurated	Lepers on record since inaugurated
1	Zagazig Clinic ... ..	5- 4-1930	944
2	Suhag Clinic ... ..	28- 4-1930	1,545
3	Tanta Clinic ... ..	22- 2-1931	1,719
4	Minia Clinic ... ..	10- 6-1931	1,044
5	Alexandria Clinic ... ..	17- 1-1938	433
6	Mansoura Clinic ... ..	10-10-1938	815
7	Shebin el Kom Clinic ... ..	12-10-1938	714
8	Qena Clinic ... ..	4- 2-1939	395

Two new clinics will shortly be created : one at Assiut and the other at Beni Suef.

Each of these clinics has branches serving neighbouring villages by means of special cars equipped with the necessary means for examination and treatment. The object is to bring treatment to the door of the poor leper who cannot afford the transport expense to the main clinics.

To some of these clinics are annexed in-patient sections where such lepers as require special treatment may be accommodated.

The following is a list showing the branches attached to the clinics and the number of patients treated in the in-patient sections till the end of this year :

Name of Unit	No. of Patients treated	Branches
Zagazig Clinic ... ..	—	Abu Hammad, Shebin el Khatat, Minia el Kamh and Abu Kebir.
Souhag „ ... ..	14	Tina, Tahta, G rga and Akhmim.
Tanta „ ... ..	29	Zifta, Mehalla el Kobra, Qallin and Kafr el Zayat.
Minia „ ... ..	32	Beni Mazar, Abu Kirkas, Samallut and Mallawi.
Alexandria „ ... ..	—	Damanhour, Idko, Rosetta, Diouk and Karmouz
Mansoura „ ... ..	—	Damietta, Simbellawen, Sherbin and Dikernis.
Shebin el Kom „ ... ..	—	Menouf, Ashmoun, Quesna, Benha and Batanon.
Qena „ ... ..	11	Luxor, Kous, Dikhna and Naga Hamadi.

## PATIENTS STATISTICS.

1,234 patients presented themselves for examination in all the leprosy clinics this year. Of these, 738 proved leprous. The rest suffered from other skin diseases and were referred to the special hospitals.

The following is a distribution of the patients according to units :—

Name of Unit	No. of Patients	Positives	Negatives
Abu Zaabal Colony ... ..	97	97	—
Cairo Hospital ... ..	2-1	196	85
Zagazig Clinic ... ..	64	48	16
Souhag „ ... ..	125	58	67
Tanta „ ... ..	170	80	90
Minia „ ... ..	32	32	—
Alexandria „ ... ..	17	59	28
Mansoura „ ... ..	166	69	57
Shebin el Kom „ ... ..	210	61	149
Qena „ ... ..	42	33	4
<b>TOTAL ... ..</b>	<b>1,234</b>	<b>738</b>	<b>496</b>

The number of lepers who presented themselves to all the leprosy units since leprosy control was started till the end of this year was 24,687 of which 12,160 proved to be leprosy and the rest were found to be suffering from other diseases and were referred to the special hospitals. Among the 12,160 patients 3,009 were recorded in more than one clinic leaving 9,151 lepers proper on record. These are distributed as follows:—

Unit	No. of Patients Registered	No. of Repeatedly registered	No. of lepers Proper
Abu Zaabal Colony ... ..	1,175	983	192
Cairo Hospital ... ..	3,166	491	2,875
Zagazig Leprosy Clinic ... ..	944	182	762
Souhag- " " ... ..	1,145	123	1,422
Tanta " " ... ..	1,719	313	1,406
Minia " " ... ..	1,041	101	942
Alexandria " " ... ..	413	109	314
Mansoura " " ... ..	815	30	485
Shebin el Kom " " ... ..	74	29	422
Qena " " ... ..	395	64	331
<b>TOTAL ... ..</b>	<b>12,160</b>	<b>3,009</b>	<b>9,151</b>

The following table gives the monthly attendance of lepers at all the units and the percentage of attendance during the year 1945:—

Month	Attendance	Percentage	Month	Attendance	Percentage
January ... ..	1,898	22	July ... ..	2,202	25
February ... ..	1,747	20	August ... ..	2,085	23
March ... ..	2,153	25	September ... ..	1,967	23
April ... ..	2,318	26	October ... ..	2,131	23
May ... ..	2,024	23	November ... ..	1,797	24
June ... ..	2,284	25	December ... ..	1,760	24

### ABU ZAABAL LEPROSY COLONY

#### *Patients Statistics.*

179 patients were isolated in the colony this year. Among them 97 were isolated for the first time.

The number of patients in isolation in the colony at the end of this year was 379.

#### *Technical Works.*

Patients are treated on admission for other diseases from which they may be suffering in order to increase their resistance to disease, a very important factor in leprosy treatment.

Following is a summary of the technical works done in the colony this year:—

(1.) Among the 97 new lepers recorded this year, 51 were of the neurotic type, 1 of the skin and 45 of the mixed type.

Most of the 82 re-isolated lepers were found in a worse condition than before. This is attributable to bad nutrition and unhealthy living conditions outside the colony.

(2.) There were 175 perforating ulcers this year. These were treated by disinfection, trimming of their edges, hot bathing and injection with hydnocarpus oil. This treatment gave good results in most cases.

(3.) 147 cases of leprosy reaction were met this year of which 73 were severe. These were treated with calcium and tartar emetic injections, sodium salicylate and magnesium sulphate mixtures



(4.) Wassermann tests on blood of lepers often give positive results though patients may not be infected with syphilis. Blood specimens were taken from lepers with severe reaction during and after the reaction to see if the reaction had any effect on the result of Wassermann Test. Following are the results of that examination :—

No. of Patients	Result of exam. before reaction	During the reaction	After the reaction
31	+	+	+
30	—	—	—
10	—	—	+
2	+	—	—

It will thus be observed that the result did not change in 88 per cent of the cases, changed to positive during and after the reaction in 14 per cent of the cases and changed to negative during and after the reaction in 3 per cent of the cases.

Because these were few, scientific results could not be obtained. This examination will be resumed next year to see if results of any value can be obtained.

(5.) About 250 of the colony's residents contracted skin diseases. 50 of these were cured, 130 improved and 70 were still under treatment at the end of the year.

(6.) Positive Wassermann patients are carefully examined to find any trace of infection with syphilis. The history of the patient and his family is investigated with a view to treating syphilitic and suspicious cases. The number of patients treated for syphilis this year was 46.

(7.) (a) An average of 180 patients were treated monthly for diseases of the alimentary tract, e.g. dysentery, gastritis and enteritis etc.

(b) An average of 5 patients were treated monthly for respiratory diseases.

(c) An average of 53 patients were treated monthly for urinary diseases.

(d) An average of 32 patients were treated monthly for blood diseases.

(e) An average of 15 patients were treated monthly for E.N.T. diseases.

(8.) Number of patients treated for parasites was as follows :—

Bilharzia ... .. 151 patients.

Ascaris ... .. 17 „

Ancylostoma ... .. 3 „

Taenia ... .. 1 „

9.—Number of wound dressings done for patients this year was 65,460, i.e. a monthly average of 5,455 dressings.

The number of ulcers cleansed and treated this year was 450, i.e. a monthly average of 37 cases.

(10.) The oculist paid the colony 39 visits to treat the ophthalmic cases.

In addition to the ordinary treatment, he performed the following operations :—

7 Trichiasis operations.

2 Pterygium „

2 Trachoma expression.

1 Removal of eye ball.

2 Dilatation of lacrymal passages.

1 Graft operation.

1 Picking of P.T. Cs. and P.T. Ds.

1 Opening of anterior chamber.

7 Excision of lepromatous masses.

1 Skin and muscle operation.

(11.) The dentist paid the colony this year 48 visits. He investigated 236 patients and performed the following operations:—

- 65 Extraction of carious teeth.
- 3 Incision of gum abscesses.

(12.) The annual clinical and bacteriological investigation of all patients at the colony was done and the result was as follows:—

- 238 patients improved.
- 123 „ stationary.
- 18 „ deteriorated.

#### TREATMENT OF PERSONNEL

Since all the colony personnel live within the colony, and because the colony is far away from any hospital, the colony medical officers undertake the treatment of the staff and their families. Medicine is issued from the colony's dispensary. Two rooms in the staff quarters were equipped as a clinic for that purpose.

Bedridden employees are examined by the medical officers in their homes. 1,771 medical examinations and 18 home visits were made this year.

#### SOCIAL ACTIVITY IN THE COLONY

##### 1.—*Patients' School.*

In this school, young lepers are instructed in reading, writing, arithmetic, hygiene and religion. Educated lepers undertake the teaching.

##### 2.—*Library.*

This library contains a good number of religious, cultural and interesting books. Certain newspapers and magazines are contributed to this library.

An average of 240 patients visit the library each month.

##### 3.—*Religious Lectures and Preaching.*

Special interest is taken in religious teaching because of its psychological effect on the patients' temper and behaviour. A special preacher delivers a weekly sermon after Friday prayers.

##### 4.—*Theatrical Concerts.*

These are held on particular occasions, e.g. commemorating the foundation of the colony, the anniversary of the Coronation day and the King's Birthday. Patients present theatrical performances in which they are sometimes assisted by professional actors from outside. Two performances were presented this year.

#### THE COLONY'S PRISON

A special prison is annexed to the colony for lepers undergoing sentences of imprisonment who cannot be detained in common prisons. This prison is under the control of the "Prisons Department." 4 jailers and 1 sergeant guard the prisoners day and night according to prisons' regulations. During day time prisoners do the work consistent with their sentence and to their conditions.

Prisoners' diet is served according to prisons regulations unless otherwise prescribed for health reasons.

Prisoners receive the same treatment as other residents in the colony.

There were four prisoners at the end of the year 1944. 16 prisoners were admitted this year; 12 were released leaving eight prisoners at the end of the year 1945.

#### INDUSTRIAL ACTIVITIES

There is no doubt that the various activities in which lepers indulge besides relieving the despondency which their isolation and prolonged treatment breed, have a direct bearing on the improvement of their general health and increasing their resistance to the disease. Moreover, a natural atmosphere is reflected on life in the colony since every leper is able to pursue his particular occupation.

"Occupational Therapy" has now become an essential part of treatment.



Clinical and bacteriological investigation this year showed that the patients who improved were those who did physical work and these were less prone to complications. Lepers whose condition remained stationary or deteriorated did no work either for being crippled or for refusing to work.

Able patients were divided into agricultural or industrial teams according to their ability and knowledge. They were supplied with instruments and machines.

Small wages were paid to these patients in the way of encouragement.

Herebelow are details of the various teams:—

1.—*Land Levelling.*

8 patients are engaged in levelling and preparing the land for cultivation. Soem 4 fcdars and 15 karats were prepared this year.

2.—*Agricultural Section.*

48 patients plough and cultivate the land.

3.—*Attendance.*

7 patients are trained in wound dressing. They were trained on dressing and nursing in order to assist the nursing staff of the colony.

4.—*Orderlies.*

44 patients are detailed to fetch and serve the meals to patients. They are also charged with cleaning the wards, serving the patients and washing their clothes and dishes

5.—*Gardening.*

10 patients look after the gardens within the patients' sections.

6.—*Stable.*

10 patients are detailed to feed, groom and prepare the animals for work.

7.—*Food Distribution and Canteen Service.*

11 patients distribute the food to patients' wards and serve the patients at the colony's canteen.

8.—*Hairdressing.*

5 patients cut the hair and shave the patients.

9.—*Carpentry.*

9 patients repair doors and windows of patients quarters and assist in building new cottages and fences, etc.

10.—*Tailoring.*

5 patients cut and sew the patients's new clothes and repair their old one.

1175 new dresses, 806 shirts, and 1,000 caps were made and 1,334 old clothes repaired this year.

11.—*Shoe-Making.*

15 patients are engaged in shoe-making and repairing old shoes. This year 1,478 new shoes and sandals were made and 1,000 old shoes repaired for the patients.

12.—*Casting.*

39 patients are engaged in casting concrete bricks for road making within the colony. They also undertake the maintenance and repair of the sanitary installations. During the year, some 7,323 concrete bricks were cast and 1,500 metres of roads were constructed.

13.—*Scavenging.*

12 patients look after the roads within the patients quarters.

14.—*Upholstery.*

Two patients stuff new mattresses and pillows for patients and repair old ones.

15.—*Education.*

7 patients undertake the education of children. Some of them act as librarians for the patients.

16.—*Watching.*

5 patients keep watch round the patients quarters.

### AGRICULTURAL ACTIVITIES

These are either carried out by the patients themselves on land adjoining their quarters and alongside the Ismailia Canal or by hired labour on land to the west of the colony where gardens have been planted to ameliorate the staff quarters and to grow vegetables for their use.

The land cultivated by the patients now produce enough vegetables and other crops that supplies from contractors have been dispensed with.

At the end of the year, there were 31 acres of land under cultivation by patients which produced the following :—

26,935	kilos of	vegetables.
5,045	„	onions and garlic
32	„	fruit
78,165	„	clover
2,047	„	cereals
240	„	clover seeds

17 other acres of land were under cultivation by hired labour which produced :—

23,708	kilos of	vegetables
2,180	„	onions and garlic
17,235	„	clover
172	„	cereals.
70	„	dried pulse.

A dairy farm was established within the colony which produced 7,364 kilos of milk during the year. It is proposed to run it on modern methods so that enough milk will be produced to meet the colony's requirements.

24 healthy labourers work on the dairy farm and the staff farm. These men perform all agricultural duties on both farms.

### WATER AND LIGHT WORKS

Water and power works are provided to supply the colony with drinking water and light. The electric current is obtained from the Egyptian State Railways power station at Abu Zaabal.

This is received in the high tension of 3,000 volts which cannot be used unless transformed into a low tension. Hence a transformer is provided to reduce the tension to 220 volts when the current can be used in lighting and driving machinery, pumps, etc. The total working hours of this transformer were 8,143 during the year. Some 73,120 watts were consumed in lighting, water filtration and driving machinery etc.

Water is lifted from the Ismailia Canal, 2.5 kilometres away, by pumps situated on the canal bank, and supplied to filtration and sedimentation basins. During the year, these pumps were kept working for 2,810 hours during which a total of 809,309 cubic metres were lifted requiring 186,100 watts of electricity,



A total of 40,580 cubic metres of potable water passed this year through the filtration plant. Some 768,729 cubic metres of unfiltered water were supplied in addition for the irrigation of land.

#### *Workshops.*

Attached to these works are small workshops equipped with all the necessary tools and machinery to carry out all minor repairs required by these stations.

### CAIRO LEPROSY HOSPITAL

This hospital has, besides, three out-patient clinics. It is temporarily used for isolating female lepers until accommodation is provided at Abu Zaabal colony for their isolation.

The number of in-patients at the end of this year was 198 and this was the maximum number the present building could hold.

Priority of admission is given to patients requiring isolation or whose homes are far away from treating centres.

#### *Social Activity at the Hospital.*

Under the occupational therapy principle, able patients in the hospital cleanse the wards, prepare the beds and wash the patients' clothes. Other patients do needle work and embroidery. There is also a team for cutting and sewing the clothes necessary for patients.

#### *Out-Patient Clinics.*

The 3 out-patient clinics are :—

##### (1) *Imbaba Clinic.*

It was opened on February 4, 1939. It is open for treatment on Saturdays. The number of patients treated there this year was 2,841.

##### (2) *Karam'dan Clinic.*

It was opened on November 15, 1939. Due to the great number of patients who attend this clinic, treatment is provided on Sundays and Wednesdays.

The number of patients treated there this year was 7,538.

##### (3) *Kaliub Clinic.*

It was opened on February 4, 1941, and it is open for treatment on Thursdays. The number of patients treated there this year was 3,277.

### TREATMENT

Besides treatment of leprosy and its complications, lepers are treated for other diseases from which they may be suffering, e.g. parasitic diseases, syphilis, skin and other diseases.

Hydnocarpus oil, antileprol ampoules, and chalmougra capsules were used this year in the treatment of leprosy.

The hydnocarpus oil is given intramuscularly once a week in initial doses of 0.5 c.c. to be increased by 0.5 c.c. weekly until a maximum dose of 5 c.cs. is reached.

Owing to shortage of this oil and import difficulties arising from war time conditions and in order to maintain treatment, the maximum dose was reduced to 2 c.cs. given in conjunction with antileprol injection and chalmougra capsules which were in stock.

The number of patients injected with hydnocarpus oil this year in all the units was 90,264 patients. 170 kilos of oil were used for that purpose.

The number of patients injected with antileprol was 5,754. The number of antileprol ampoules used for this purpose was 2,953 containing about 4,430 c.cs.

The number of patients given chalmougra capsules was 4,611, given 13,409 chalmougra capsules.

### PROPOSALS

(1) Creation of in-patient sections in all out-patient clinics.

(2) Expansion of the leprosy colony at Abu Zaabal and providing sufficient buildings to accommodate female lepers.

(3) Construction of two colonies : one in Lower Egypt and the other in Upper Egypt

## Part V.—RESEARCHES AND LABORATORY EXAMINATIONS

### Chapter XVIII.—SUMMARY OF THE WORK OF THE PUBLIC HEALTH LABORATORIES

#### 1.—*Bacteriological Section.*

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories during the year 1945 was 591,677.

#### 2.—*Clinical Pathological Section.*

4,341 specimens were examined during the year under review in this Section.

#### 3.—*Chemical Section.*

The total number of samples examined chemically in the Central Laboratories, Assiut and Tanta Chemical Laboratories, during the year 1945 was 58,139.

#### 4.—*Water Section:*

##### (a) Bacteriological Service.

The total number of samples of water, aerated water, ice and syrup examined by this section during the year 1945 was 7,194.

##### (b) Chemical Service.

During the year some 860 samples of water have been subjected to chemical analysis

#### 5.—*Antirabic Institute and Hospital.*

During the year 1945,—10,281 patients attended the Institute, out of these 9,084 were fully treated.

#### 6.—*Serum and Vaccine Laboratory.*

The following vaccines and sera have been prepared during the year 1945 :—

(1) T.A.B. ... ..	943,725 ccs.
(2) Anti-plague vaccine ... ..	47,075 „
(3) Cholera vaccine ... ..	79,000 „
(4) Typhus vaccine ... ..	20,050 „
(5) Diphtheria prophylactic (Formal Toxoid) ... ..	28,893 boxes — each box for one person.
(6) Calf lymph vaccine ... ..	13,830,800 doses.
(7) Diphtheria antitoxin ... ..	7,128 amp., 10 ccs.—containing 4000 I.U 100 litres.
(8) Anti-Tetanus serum ... ..	{ 2,973 amp., 2.2 ccs. 3,000 Units. .
	{ 4,827 „ 1.5 „ 3,000 „
	{ 4,416 „ 2 „ 3,000 „
	{ 1,029 „ 5.5 „ 9,000 „
(9) Anti-Scorpion serum ... ..	{ 9,683 „ 2.5 „
	{ 4,578 „ 3 „
	{ 23,700 „ 2 „
	{ 45 litres.



[illegible]

# ANTHELMINTICS USED

1.—*Ancylostoma*.—Carbon tetrachloride was used in doses of 5 c.cs.

2.—*Ascaris*.—Oil of chenopodium in doses of 2.5 c.cs.

3.—*Mixed Infections with ancylostoma and ascaris*.—Oil of chenopodium was given first to rid the patients of ascaris worms, c.t.c. was then given for ancylostoma.

4.—*Taenia saginata*.—Extract of felix mass was the drug used. Owing to shortage of stock and to difficulties in procuring the drug, the plant itself was procured and was extracted by the biochemical laboratory of the institute. The drug was then dispensed in gelatin capsules each containing 0.5 c.c.

5.—C.T.C. as for ancylostoma was used.

The above mentioned doses are those estimated for an adult weighing 60 kgs. or over. Children were given proportionately smaller doses on the bases of their weights.

In all cases stool re-examinations were done a week after receiving the appropriate treatment. Those still harbouring the infection were given a second dose. Those who have apparently got rid of their infections were told to report for re-examination of their stools one and two months after treatment, patients were considered cured only if their stools were negative for ova on two successive examinations at one month interval.

## A.—Treatment of ancylostoma infections.

1438 patients harbouring hookworms presented themselves to the institute's O.P. Department. Of these, 1,030 either did not report for treatment altogether or failed to report for re-examination of their stools after the 1st dose of C.T.C. Thus only 408 patients reported one week after their first treatment. Re-examination of the stools of these 408 patients showed 136 of them to have been rid of their infection, i.e. 33.3%. The remainder (272 patients) were still infested. 50, patients, that is roughly two-thirds of patients harbouring ancylostoma, required more than one dose of C.T.C. to rid them of their worms. 146 of the 272 patients still infected reported for a 2nd dose of C.T.C. and the stool examination was negative for ancylostoma ova in 55 (i.e. 34.1%), 34.8% became negative after the 3rd dose and 55% became negative after the 4th dose of C.T.C.

## B.—Treatment of Ascaris infections.

I.—Stools negative for ova after	1st dose in	55.9%
II.— „ „ „ „	2nd „	43.7%
III.— „ „ „ „	3rd „	48.4%
IV.— „ „ „ „	4th „	55.5%

That is to say that roughly 45% of patients infected with ascaris require more than one dose of oil of chenopodium to rid them of their infection.

## C.—Treatment of H. Heterophyes.

Treatment of Heterophyes with extract of felix mass is a quick and successful method. The total number of treated patients was 33. 31 or 93.9 % were cured after the 1st dose.. The remaining two were cured after the 2nd dose.

## D.—Treatment of Hymenolipes nana.

Stool examinations were negative for this parasite in 41% of patients after the 1st dose of felix mass. So very few of the remaining patients reported for a 2nd dose or for reexamination, that no definite conclusions as to further percentage of cure could be drawn.

## E.—Treatment of T. Saginata.

Criterion for cure is identification of the head in parts discharged after treatment with felix mass. As segments may continue to pass for some time after treatment, and discharge of the head be delayed, it has not always been possible to ascertain the passage of the head in out-patients. If only patients reporting after 2 months from treatment for reexamination of their stools are considered, it will be found that the stools of only



5 out of 53 became negative for *Taenia* segments and ova after the 1st dose, the stools of 2 out of 13 patients became negative after the 2nd dose, and the stools of only one out of 5 patients became negative after the 3rd dose. Thus percentage of known cure are as follows :—

(a)	After 1st dose	...	...	...	...	9.4%
(b)	„ 2nd „	...	...	...	...	15%
(c)	„ 3rd „	...	...	...	...	25.0%

#### F.—*Treatment of oxyuris.*

It has not been possible to fully examine out-patients to determine their cure after C.T.C. treatment. Microscopic examination of stools for worms and ova only.

On these criteria alone it was found that 65.4% of the patients ceased to pass worms and their stools were negative for ova one week after the 1st dose of C.T.C. Most of patients then failed to report again so that definite conclusions could not be deduced.

#### GENERAL REMARKS

It is to be noted that in cases of ancylostoma, ascaris, hymenolipes, *Heterophyes* and *oxyuris* infections, the percentages above mentioned are for results of stool reexaminations one week after treatment only, and cannot therefore be taken as an index of complete cure since cures can only be considered “complete” when stool examinations remain persistently negative for two months after treatment. In cases of *Taenia saginata*, the same holds true since cure as mentioned above can only be based upon identification of the head in the stools.

#### TREATMENT OF BILHARZIASIS DURING 1945

Drugs used for treatment of Bilharziasis during 1945 were Fouadin or its homologue stibophen.

Dosage varies with the patient's weight. An adult weighing 60 kgs. or over is given 1.5 c.c.s. for the 1st, 3.5 c.c.s. for the second and 5 c.c.s. for the 3rd and subsequent doses. The drug is given intramuscularly in the upper, outer quadrant of the gluteal region. The 1st 5 doses are given on successive days and the next four doses on alternate days. The urine or faeces is examined after the 9th injection and if found to contain viable ova, the patient is given 2 more injections. Urine and stools are reexamined and if again found to contain viable ova, 2 further injections are given. This is repeated until 15 injections in all are given.

#### RESULTS OF ANTIBILHARZIAL TREATMENT

It will be seen that :

I.—	Urine and/or stools were negative after	9 injections	in 50.5% of Pts.
II.—	„ „ „ „	11 „	„ 57.6% of Pts.
III.—	„ „ „ „	12 „	„ 73.6% of Pts.
IV.—	„ „ „ „	15 „	„ 83.3% of Pts.

These results refer to re-examinations immediately following the respective doses. It is seen that almost one half of the patients require more than 9 injections to cure them. Patients were instructed to report for re-examination at frequent intervals for a period of two months following their treatment during which period their urine examinations showed persistent negative results before being considered cured.

#### ANAEMIA

The Haemoglobin percentage was estimated for each patient attending the O.P. department before giving anthelmintics. 308 patients had less than 50%. The range varying from 10–50%.

The cause of anaemia was either parasitic infection especially with ancylostoma or other diseases to be mentioned below.

### *Anaemia due to parasitic infections*

278 patients had anaemia with Hb less than 50 % due to the following parasitic infections :—

I.—Ancylostomiasis	...	...	...	...	209	patients.
II.—Intestinal mansoni bilharziasis	...				32	„
III.—Intestinal haematobium bilharziasis					15	„
IV.—Urinary Bilharziasis	...	...	...	...	9	„
V.—Ascariasis alone	...	...	...	...	6	„
VI.—Malaria	...	...	...	...	7	„

Non parasitic anaemia cases numbered 35. Four of these had idiopathic hypochromic anaemia. Nine patients had severe posthaemorrhagic anaemia. Four patients had chronic nephritis and five suffered from chronic amoebic dysentery.

The W.R. was positive in 3 patients. The cause of the anaemia was obscure in the remaining (five) patients.

Anaemia was treated by a mixture containing 2 gms. of iron and ammonium citrate per dose, this being given 3 times daily. Treatment was continued until the Hb percentage rose to 50 % or over after which the specific treatment was instituted. The rise in the Hb percentage varied between 5 and 12 % per week.

## HEPATIC AND/OR SPLENIC ENLARGEMENT

Patients found on clinical examination to be suffering from hepatic or splenic enlargement or to present the syndrome of hepatosplenomegaly totalled 431. One hundred and twenty-four of them had enlarged livers alone, 169 had enlarged spleens only and 138 had hepatosplenomegaly. The aetiological factors were as follows:—

A.—*Hepatomegaly alone.*

I.—Intestinal	mansoni bilharziasis	...	...	...	...	...	...	...	25 Pts.
II.—	,, haematobium bilharziasis	...	...	...	...	...	...	9	,,
III.—Urinary	bilharziasis	...	...	...	...	...	...	54	,,
IV.—Benign tertian	malaria	...	...	...	...	...	...	6	,,
V.—Malignant	malaria	...	...	...	...	...	...	2	,,
VI.—Jaundice		...	...	...	...	...	...	17	,,
VII.—Amoebic	hepatitis	...	...	...	...	...	...	5	,,
VIII.—Syphilis		...	...	...	...	...	...	4	,,
IX.—Cancer of liver		...	...	...	...	...	...	4	,,

B.—*Splenomegaly alone:*

I.—Intestinal mansoni bilharziasis	... .. .	42 Pts.
II.—Intestinal haematobium bilharziasis	... .. .	5 „
III.—Urinary bilharziasis	... .. .	47 „
IV.—Benign tertian malaria	... .. .	62 „
V.—Malignant malaria	... .. .	9 „
VI.—Syphilis	... .. .	2 „
VII.—Typhoid fever	... .. .	11 „



C.—*Hepatosplenomegaly.*

I.—Intestinal mansoni bilharziasis	...	...	...	...	...	...	...	42	Pts.
II.— „ haematobium bilharziasis	...	...	...	...	...	...	...	5	„
III.—Urinary bilharziasis	...	...	...	...	...	...	...	60	„
IV.—Benign tertian malaria	...	...	...	...	...	...	...	17	„
V.—Malignant malaria	...	...	...	...	...	...	...	7	„
VI.—Syphilis	...	...	...	...	...	...	...	5	„
VII.—Hodgkin's disease	...	...	...	...	...	...	...	1	„
VIII.—Tuberculosis	...	...	...	...	...	...	...	1	„

MALARIA

Blood smears and thick drops are examined on the 1st day of the patient's attendance and treatment dispensed on the same day. In chronic cases, concentration methods and thick drop examinations after adrenaline injections are used. Adrenaline is given to cause contraction of spleen, thus forcing its blood with any contained parasites into the circulation. Patients attend the O.P. weekly for re-examination and evaluating results of treatment. One hundred and twenty one patients were treated for malaria at the Institute during 1945. 92 of these patients had been inhabitants of Qera and Aswan provinces where they had acquired the infection and were suffering from relapses at the time of their examination at the Institute.

A.—*Benign Tertian Malaria.*

88 patients suffered from B.T.M. among whom 62 patients (70.4%) had splenomegaly in the absence of any other conditions conducive to enlargement of the spleen. Those who suffered from anaemia with a Hb less than 50 % were 19 in whom no other contributory factors for production of anaemia were found.

B.—*Malignant Tertian Malaria.*

27 patients suffered from M.T.M., 9 of these, i.e. 33.4 % had splenomegaly and 4 had severe anaemia. It is thus seen that the proportion of patients who have splenomegaly is higher among those afflicted with B.T.M. than among those suffering from M.T.M. Where marked anaemia is concerned, however, the proportion is reversed.

All malarial patients were treated in the routine way by three atebrin 0.1 gr. I.T.Ds. for 5 days followed by three 0.02 tablets of plasmochin simplex T.Ds. for 7 days.

No toxic symptoms other than yellow pigmentation after atebrin in 3 patients were observed.

AMOEBIIC DYSENTERY

140 amoebic dysentery patients were treated at the Institute during 1945. Of these 105 harboured vegetative amoeba histolytica, and amoeba histolytica cysts were identified in the remaining 35. All the patients suffered from dysenteric symptoms, acute or chronic and amoebic hepatitis was diagnosed in 5 patients. The patients were treated by daily injections of emetine 0.06 for 6 successive days after which a course of carbarson or spirocid was given. A comparative study of the effect of various drugs used in the treatment of amoebic dysentery including sulphaguanidine was done at the Institute during the 1st half of 1945. The results of this study were published in a separate report and resumé of it will be inserted at the end of this report.

DYSENTERIC SYMPTOMS ASSOCIATED WITH H. HETEROPHYES INFECTIONS

Patients infected with H. heterophyes treated in the O.P. department of the Institute with extract of felix mass numbered 33. As previously mentioned, a dose of 4 c.cs. for an adult weighing 60 kgs. or over proved to be an efficient remedy. Patients suffering from H. heterophyes infection generally complain of intermittent attacks of simple diarrhoea, diarrhoea accompanied by tenesmus sometimes with blood and mucus or they may complain of vague abdominal discomfort, flatulent dyspepsia and intestinal colic.

Examination of the stools with the naked eye showed :—

A.—Presence of blood in 4 cases.

B.—Presence of mucus in 16 cases.

C.—Unformed stools without blood or mucus, 8 cases.

D.—Formed and apparently normal stools, 8 cases.

No constitutional symptoms were encountered.

#### FLAGELLATE " DYSENTERY "

The diarrhoea associated with giardia intestinalis (lamblia) cannot strictly be classified as dysentery.

28 patients harbouring this parasite presented themselves to the O.P. department. 21 of them were under 12 years of age. 13 failed to return for treatment, while the remaining 15 were treated as out-patients with atebrin in the same manner and dosage as for malaria. One week after treatment, the parasites had disappeared from the stools of 9 patients, 3 patients failed to report again and treatment had to be repeated one month later for the remaining 3 patients.

#### BACILLARY DYSENTERY

Patients suffering from bacillary dysentery and treated in the Institute O.P. Dept. during 1945 numbered 59 patients. The causative organisms were as follows :—

(1) Flexner bacillus	...	...	...	18	Pts.
(2) Sonne	„	...	...	18	„
(3) Shiga	„	...	...	16	„
(4) Morgans	„	...	...	7	„

They were treated by sulphaguanidine in doses of 0.1 gram per kilogram of body weight as an initial dose and then the same amount daily in 4 or 6 divided doses (6-4 hourly). Those who were not completely cured had all their symptoms ameliorated and markedly improved generally.

#### SECTIONS ATTACHED TO THE HOSPITAL

##### Haematologic section.

Haemoglobin estimations	...	...	...	...	...	...	...	...	...	5.489
Red blood cell counts	...	...	...	...	...	...	...	...	...	849
Total white blood cell counts	...	...	...	...	...	...	...	...	...	1.128
Differential white cell counts	...	...	...	...	...	...	...	...	...	1.002
Platelet counts	...	...	...	...	...	...	...	...	...	45
Reticulocyte counts	...	...	...	...	...	...	...	...	...	10
Examinations for malaria	...	...	...	...	...	...	...	...	...	782
„ „ „ borrelia	...	...	...	...	...	...	...	...	...	802
„ „ „ filaria	...	...	...	...	...	...	...	...	...	19
Blood-coagulation time	...	...	...	...	...	...	...	...	...	45
Bleeding time	...	...	...	...	...	...	...	...	...	45
Erythrocyte sedimentation rate	...	...	...	...	...	...	...	...	...	52
Sternal puncture	...	...	...	...	...	...	...	...	...	10

##### X-Ray Section

Radiological examination of the

A.—Chest	...	...	...	...	...	...	...	total	36	cases
Pulm. T. B.	...	...	...	...	...	...	...		6	patients
Abscess of lung	...	...	...	...	...	...	...		2	„
Pleural refusion	...	...	...	...	...	...	...		3	„
Chronic bronchitis	...	...	...	...	...	...	...		10	„
Normal findings	...	...	...	...	...	...	...		15	„

In addition 320 out-patients were screened.



B.— <i>Urinary tract</i>	...	...	...	...	...	...	...	total	33	cases
Renal calculi	...	...	...	...	...	...	...		3	„
Ureteral „	...	...	...	...	...	...	...		2	„
Bladder „	...	...	...	...	...	...	...		4	„
Bilharzial calcification of bladder	...	...	...	...	...	...	...		9	„
Normal findings	...	...	...	...	...	...	...		15	„
C.— <i>Miscellaneous</i>	...	...	...	...	...	...	...	total	10	cases
Skull	...	...	...	...	...	...	...		2	„
Spine	...	...	...	...	...	...	...		2	„
Stomach and duodenum	...	...	...	...	...	...	...		6	„
One case each of chronic gastric, and chronic duodenal ulcer was found among these 6 patients										

### *Bacteriologic Section.*

A.—440 stool cultures were done for dysentery bacilli. 369 cultures were negative and 71 cultures were positive of these:

- I.— 16 gave a growth of shiga bacillus
- II.— 18 „ „ flexner „
- III.— 18 „ „ sonne „
- IV.— 17 „ „ morgans „
- V.— 10 „ „ paracolon „
- VI.— 1 „ „ Paratyphoid A
- VII.— 1 „ „ „ B

B.—108 urine cultures were done. 59 gave negative results, 49 were positive: —

- I.— 32 showed a growth of B. coil
- II.— 3 „ „ P. pyocyaneus
- III.— 4 „ „ B. friedlander
- IV.— 3 „ „ B. Typhosus
- V.— 4 „ „ B. Paratyphosus A and B.
- VI.— 3 „ „ B. Paracolon

C.—Sputum examination for Tubercle bacilli was done 104 times. The results were positive in 20 cases.

D.—Smear examinations of urethral discharge for gonococci were done for 12 cases 9 of which were positive.

E.—Four blood cultures were done. All gave negative results.

### RESUMÉ OF RESEARCH WORK DONE AT THE INSTITUTE DURING 1945.

All the researches were published in a special number of the journal of the Royal Egyptian Medical Association.

1.—Evaluation of the cephalin cholesterol flocculation and colloid gold tests as indices of liver function in Bilharzial cirrhosis of the liver:—

- (a) C.C.F. test was performed on the sera of 8 patients showing no clinical evidence of dysfunction of the liver and was found + in 5 of them.
- (b) The same test was done with the sera of 13 cases of bilharzial cirrhosis of the liver and the result was plus one in 4 cases plus 2 or more in the rest.
- (c) The same test was positive in 31 out of 32 patients suffering from infective hepatitis. The result was positive one in 5 patients and positive 2 or more in 26 patients.
- (d) Colloidal gold test was performed with the sera of 10 patients with no clinical evidence of hepatic dysfunction and the result was plus one in only one patient.

- (e) The same test was done on 20 patients with bilharzial cirrhosis of the liver and was found to be negative in 3 patients, positive one in 2 and positive 2 or more in 15 patients.
- (f) The same test was also done with the sera of 8 malarial and 3 amoebic dysentery patients and the result was positive 2 or more in all of them.
- (g) The colloidal gold test was positive in 60 out of 65 cases of infective hepatitis (+ + in 55 and + in 5 patients), whereas the same test was positive in only one out of seven cases of obstructive jaundice.

2.—Treatment of amoebic dysentery with sulphaguanidine and comparison with emetine and other drugs used for its treatment:—

- (a) It was found that the clinical symptoms of dysentery improved satisfactorily on sulphaguanidine, but relapses are frequent after cessation of treatment.
- (b) Such relapses occurred on the average, about 10 days after cessation of treatment, while it was estimated that relapses occurred 21-27 days after emetine treatment.
- (c) It was found that chronic amoebic cases improved upon treatment simultaneously with emetine and sulphaguanidine.
- (d) Enterovioform and dysentran affect mostly the cystic stage, but their effect on the vegetative stage was far inferior to that of emetine.

3.—The Effect of Penicillin on Protozoa.

- (a) Penicillin has no effect upon leishmania or human malaria.
- (b) It has no effect on coccidia.
- (c) Penicillin has a favourable effect upon fulminating and hyperacute cases of amoebic dysentery. It affects only the clinical symptoms, but the amoebae are not affected.
- (d) If penicillin is added in high concentrations to the culture media of amoebae, it retards their growth, most probably due to its effect upon micro-organisms which normally contribute to normal growth of the amoebae.

4.—A study of the infecting organisms associated with urinary bilharziasis.

- (a) Bilharzia infection renders the mucous membrane of the bladder susceptible to invasion by various organisms such as *B. coli*, *B. pyocyaneus*, *B. typhosus* and *B. friedlander*.
- (b) It was estimated that 2 years must have elapsed without treatment before these organisms established a foothold in the mucosa of the bladder.
- (c) These organisms may be found in patients not suffering from bilharziasis and give rise to no symptoms.
- (d) Antibilharzial treatment alone may some times suffice to eradicate these organisms from the urine of bilharzial patients.

5.—The discovery of new trematode.

On dissecting a fish of the species caught in one of the Mediterranean Sea fisheries, 10 flat worms of the (trematodes) were found. They differed from other species of the same family and have been named *Hamocreadium morgani*.

6.—A comparative study of D.D.T. upon various insects and its pathological effect upon the various organs of experimental animals.

7.—Estimation of nicotinic acid by means of Spanogue-Brumide-Aniline and the effect of light and heat upon this method.

8.—The vitamin content of Hydatid fluid:—

It was found that hydatid fluid contained vitamin B in a proportion of 0.3–1.2 per cent, nicotinic acid (35–350 per cent) and Vit. C (1.85–12.5 per cent).



9.—A report of a case of human coccidiasis :—

This was the 3rd case of coccidiasis reported in Egypt during the past 10 years. The patient was a girl 10 years old, who suffered at the same time from amoebic dysentery.

10.—A report of a case of Encephalopathy following T.E. treatment in a male patient 35 years.

11.—A report of a case of Raynauds phenomenon following quinine treatment for malaria in a female patient aged 15 years.

12.—A description of a case of juxta-articular nodules in a syphilitic patient.

## DEPARTMENT OF PROTOZOOLOGY

### CURRENT RESEARCHES

#### 1.—Culture of *Entamoeba histolytica*.

Last year, *Entamoeba histolytica* was grown on hydatid fluid. Results of such cultures were compared with cultures in some other natural fluids such as hydrocele and ascitic fluids and comparison was also made between results of cultures on this new medium (Hydatid fluids) and the old well known media of Boeck and Drbohalv and of Dobell and Laidlow. It was concluded from this comparison that hydatid fluid was superior to all other media.

Attempts were then made to establish the factors concerned in the successful growth of the parasite (E.h) on this medium and the following conclusions were reached :—

(a) Of the known factors essential for the success of growth of *E. histolytica* is the concentration of the hydrogenions in the medium used, so that the PH is slightly on the alkaline side at the beginning. Hydatid fluid was found to have a PH of 7.3 – 7.7 and there is no doubt that this PH, most favourable for growth of amoeba, is of prime importance. It was also found that the H-ion concentration and the profuse growth of amoebae had a marked effect on the process of encystation in hydatid fluid. The PH of 7.7 at the beginning of the culture and of 7.4 after 48 hours were very favourable for encystation.

(b) Some authorities working on the subject of amoebic culture advise the addition of quantities of the water soluble vitamins to the culture media for the betterment of favourable conditions for the growth of amoeba, and we have been able to demonstrate the presence of such vitamins in hydatid fluid. The following were present in the indicated concentration :

#### *Vitamin B.*

0.3 – 1.2      Gamma per 100 c.c.

3 – 10            „      „      100 „

#### *Nicotinic acid.*

35 – 350            „      „      100 „

#### *Vitamin C.*

1.85 – 12.5            „      „      100 „

It is probable that the presence of these vitamins in hydatid fluid is one important factor enhancing the growth of amoeba in it.

(c) Some authorities emphasize that amoeba requires a certain amount of cholesterol and its addition to culture media enhances its growth, but others deny this. It has been possible to demonstrate the presence of cholesterol, in a number of specimens of hydatid fluid. When devoid of cholesterol, this was added to the fluid before culturing but there was no appreciable enhancing effect upon the growth of amoeba by the addition of cholesterol.

(d) It was proved that the addition of rice starch was essential for the growth of amoebas in hydatid fluid.

(e) It is well known that the growth of *E. histolytica* in the various media requires a certain bacterial flora. It has been found that bacteria flourish well in hydatid fluid and attempt was made to prove that such bacteria assisted the growth of *E. histolytica* in hydatid fluid so penicillin was added to the cultures. When the medium contained a high concentration of penicillin the amoeba failed to grow. The process of excystation was also inhibited in such a medium. So were also counted the organisms that grew symbiotically with amoeba in the tubes to which penicillin had been added in high concentrations (2000 units per one c.c. of hydatid fluid) ; the amoebae were very rare in such tubes. These were also counted in the tubes to which penicillin had not been added and in which the amoebae grow profusely and the results were as follows :

Bacteria	Number of bacteria in every c.c.	
	Amoebic cultures é no penicillin	Amoebic cultures é 2000 units of penicillin per one c.c.
B. coli... ..	150,000,000	600,000
Total bacterial count	550,000,000	80,000,000

It is obvious from this table that penicillin affects the bacteria growing simultaneously in the culture media, with *E. histolytica* thus inhibiting their growth and multiplication and so deprives *E. histolytica* of an important factor for its growth thereby ceasing itself to grow and multiply ; a point supported by the work of all authors on the subject.

## 2.—The Effect of Penicillin on some Protozoa.

### (a) *Leishmania tropica*.

This parasite was cultured on N.N.N. medium with weekly subcultures and it was possible to preserve it for 8 successive months. It has been demonstrated that penicillin has no effect on *Leishmania* in vitro.

(b) Malaria was not affected by penicillin either.

(c) *Coccidia* of rabbits also was not affected by penicillin at all.

(d) The effect of penicillin upon cultured *E. histolytica*, as pointed above, is an indirect one. It robs it of the bacteria useful for its growth and thus it perishes. Excystation also is inhibited.

The therapeutic effect of penicillin upon patients suffering from amoebic dysentery however was favourable in the acute cases since the symptoms rapidly improve though the parasite persists in the patient's stools.

Penicillin also had no therapeutic value upon bilharzial or malarial patients.

This work was read at the 17th medical conference held in Cairo in November 1945 and will be published soon.

## 3.—Human *Coccidioidoses* in Egypt.

No cases of *Isospora hominis* have thus far been reported in Egypt. This condition must be very rare in Egypt, since in the past 10 years we came across 3 cases only. A report of the last case encountered will be published soon.



#### 4.—*Hydatid Disease in Egypt.*

The protozoology section has also undertaken an investigation of the incidence of hydatid disease in Egypt and the distribution of the cysts in the various organs of the body and of its diagnoses by serum reaction in Egyptian slaughter animals, but this has not been yet completed and will be continued next year.

#### STOOL EXAMINATION FOR PROTOZOA

Specimens examined once only for protozoa totalled 1,624. All were positive for protozoa as follows:—

<i>E. histolytica</i> vegetative	...	...	...	...	...	...	183	i.e.	11.26	%	} 15.33%
<i>E. histolytica</i> cysts	...	...	...	...	...	...	66	,,	4.06	%	
<i>E. Coli</i>	...	...	...	...	...	...	362	,,	22.2	%	
<i>Endolimax nana</i>	...	...	...	...	...	...	16	,,	0.9	%	
<i>Iodamoeba butchilli</i>	...	...	...	...	...	...	70	,,	4.3	%	
<i>Giardia lamblia</i>	...	...	...	...	...	...	43	,,	2.6	%	
<i>Trichomonas hominis</i>	...	...	...	...	...	...	86	,,	5.2	%	
<i>Chilomastix mesnili</i>	...	...	...	...	...	...	37	,,	2.2	%	
Negative	...	...	...	...	...	...	761	,,	46.8	%	

Specimens examined more than once numbered 956 thus making up a total of 2,589 (1,624 + 965) specimens examined during 1945.

#### BIO-CHEMISTRY DEPARTMENT

1.—Study of the liver function tests as the G.G.T., C.C.F.T., Quick test and Laevulose test. These tests were carried out in the diff cases of ancylostoma, jaundice and bilharzia. In the last case, tests were carried out before and after antimony treatment. This work will be published in the special number of the Journal of the Royal Egyptian Medical Association for the research institute.

2.—V.B1 was estimated in blood and urine of patients suffering of ancylostoma and bilharzia, oedema, jaundice and pellagra and other parasitic diseases after test dose. Most of these tests appeared to be deficient in V.B1.

3.—The concentration of sulfaguanidine in blood and urine and stools of patients infected with *E. histolytica* after the treatment with this drug, the stool was collected every 24 hours since the beginning of giving the drug. Blood samples were taken every 12 hours. The estimation was carried out continuously till the amoeba disappeared from the stools.

4.—*Brayera anthelmintica* was brought from Abyssinia to extract the active principle with a view to studying its effect on patients infected with taenia. The method adopted in extracting the male fern was used. The extract was given first to dogs to estimate its toxicity. A dose of 0.15 g./kg. body-weight was found to be effective to get rid of the whole worm. A preliminary report on the subject will be published.

5.—The hydatid fluid was analysed chemically for its vitamin content: V.B1, nicotinic acid, V.c. were estimated. The results will be published in the journal of the Egyptian Medical Association.

6.—The department took part in a research done on relapsing fever to estimate protein in blood and carrying out the most recent liver function tests as Cephalin Cholesterol Test and Colloidal Gold Test. The results will be published.

#### ESTIMATION OF A VITAMINS IN CASES OF PARASITE INFECTION

7.—Due to the importance of estimation of nicotinic acid in blood and urine of pellagrins, a study of the sensitivity of the methods adopted in the estimation was carried out and the effect of light and temperature on the method of estimation was investigated. This research will be published in the special number of the Journal of the Royal Medical Association for the Research Institute.

8.—References for the methods of vitamin estimation were collected. The latest and most accurate of these were tried in estimating the vitamins in blood and urine with a view to choosing the best of them with regards to availability of chemicals for use in the survey it is proposed to carry out on vitamin deficiency in the Egyptian village and establishing its relation to parasitic infections and malnutrition.



9.—The alcoholic garli extract was prepared and its action on oxyuriasis was studied. The results will be published in the reports of the hospital.

10.—Certain samples of chemicals are frequently sent from the Mini investigation and to determine its conformity to the required specifications, e.g. sample of citrcnella oil which is used in the preparation of insecticides. This sample was not found corresponding with the B.P. and was therefore rejected.

Again enterovioform tablets were investigated for contents of opium and its derivatives or any other alkaloid. Analysis showed absence of these compounds.

11.—On account of the difficulty of obtaining gelatin capsules of Felix Mas and their high cost, the active principle was extracted with ether but in small quantities. Experiments are being carried out to prepare bigger amounts to try its effect on patients.

12.—Members of missions sent from Palestine and Syria are trained in biochemical analyses technique as carried out in the Institute.

13.—The department carried out the analysis of 4,343 specimens forwarded by the hospital.

### **Work done in Fayed Malaria Station**

This Malaria Station is concerned with control and treatment of malaria within the area between kilometre 29 and kilometre 67 to the south of Ismailia town and between the Suez Canal and the fresh water canal. 59 kilograms of Paris green and 44.070 tons of malariol were used in dusting and spraying mosquito breeding places such as swamps, canals, drains and water closets, etc. All the small ditches have been filled in.

Anopheles larvae were found breeding in 67 of the places treated and in the proportion of 55 per cent *Anopheles pharoensis*, 42 per cent *Anopheles multicolour* and 3 per cent *Anopheles sergenti*.

Of 14,383 patients examined in the station, 144 were found positive for malaria or (1 per cent) which is a very low ratio as compared with the previous year. A positive ratio as high as 50 per cent was found among patients attending from distant villages outside the area.

The majority of patients were treated with atebrine. Plasmoquine was used for treating malignant cases and quinine chocolate and euquinine for children. 7,625 iron pills were dispensed to weak patients.

### **Work done by Khanka Malaria Research Station**

Of 21,508 patients examined for malaria this year, 1,273 were found positive or a ratio of 5.9 per cent. The incidence of malaria this year is very low as compared with the incidence in the last 10 years. This is due to the great efforts which have been spent in combating malaria from the beginning of the year. A number of well trained labourers were appointed for oiling all breeding places with malariol once a week specially the area of Abu-Zaabal prison where the incidence of malaria has fallen to a great extent this year namely 1 per cent as against 56.6 per cent in 1942.

### **Malarial report for Year 1945**

During 1945, 67,453 thick drops and blood films were received for examination of which 1,064 were unfit for staining and examination.

Of this number 8,139 specimens were positive for malarial parasites of which 7,098 specimens were positive for benign tertian parasites, 1023 for malignant tertian and 18 for mixed infection. Among these blood films and thick drops, 125 specimens were positive for *Treponema recurrentis*.



## ENTOMOLOGICAL SECTION

During 1945, the Entomological Section received 4,338 tubes containing insects for identification of which 289 or 6.6 per cent were broken. Of these, 2,909 tubes contained one type of culicine larvae, 162 tubes contained 2 types and 12 tubes contained 3 types. 139 tubes contained adult mosquitoes of which 130 contained 1 type each and 9 contained more than 1 type each.

The section also received 29 tubes containing members of phylum "Arthropoda" collected from air crafts and 795 tubes containing insects from trapped rats at sea ports and were found to contain fleas of the genus *Xenopsylla*, *Leptopsylla*, *Ctenocephalus* and *Echidnophaga* which were *Cimex* larvae amongst them.

13 members of the medical staff and 45 laboratory assistants were sent to the section from the different departments of the Ministry of Public Health for training and study of malaria mosquitoes and their control.

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## Chapter XX.—SUMMARY OF THE WORK OF THE MEMORIAL OPHTHALMIC LABORATORY, GIZA

*Post-Graduate Instruction.*—As in previous years, the Staff of the Laboratory shared in the teaching of candidates for the Diploma of Ophthalmic Medicine and Surgery. Courses of lectures on bacteriology, fundus diseases, slit-lamp microscopy were given and practical demonstrations were held.

*Pathology.*—The routine pathological work of the Government Ophthalmic Hospital was carried out as usual at the Laboratory.

In all, 737 pathological specimens were reported upon. Fifty-six enucleated globes were received for examination in the course of the year.

*The Research Work* of the Laboratory was continued, especially in relation to trachoma and the acute ophthalmias. Details may be consulted in the Reports of the Laboratory.

# Appendix I.—SUMMARY OF THE REPORT OF THE UNIVERSITIES HOSPITALS ADMINISTRATION

## Fouad I University Hospitals

The number of beds in this hospital was 1,208 with a slight difference than in 1944. The section created in 1944 for penicillin treatment with an accommodation of 25 beds was closed down and substituted by a 17 bed medical diseases section for the treatment of pupils of the nursing school. Otherwise the number of beds and the treatment sections remained the same as in 1944.

### IN-PATIENT DEPARTMENT

A total of 21,358 patients were admitted during the year to the various treatment sections of the In-Patient Department with an increase of 1,863 patients over 1944. The following is the distribution of the patients as compared with those of 1944:—

Section	No. of patients	
	1945	1944
Medical diseases ... ..	7,317	7,574
Casualty ... ..	5,451	4,679
Derm tology ... ..	1,303	1,050
Venereal ... ..	1,052	1,055
Radiology ... ..	489	415
Erysipelas ... ..	663	531
Urology ... ..	1,301	973
Gynaecology ... ..	1,842	1,462
Other Sections ... ..	1,940	1,756
TOTAL ... ..	21,358	19,495

May, June, July and August were the most crowded months with 2,420 patients during July followed by 2,155 patients in June.

February was the least month with 1,287 patients. 15,893 patients including 1,591 children were discharged as cured or improved. 3,270 patients were transferred to the out-patient department and 1,184 patients to other hospitals for completion of their treatment.

There were 1,011 deaths recorded during the year distributed as follows : 750 in the medical diseases sections, 117 in the casualty section, 30 in the urology section, 10 in the dermatology section, 8 in the venereal diseases section, 21 in the radiology section, 55 in the erysipelas section and 20 in the gynaecology section.

Of 2,766 cases of respiratory system diseases treated, 996 cases with 287 females suffered from tuberculosis or 35 per cent of the total cases. 318 cases with 76 females suffered from bronchitis, 297 cases with 84 females suffered from pleural effusion, and 158 cases with 12 females suffered from emphysema. These figures show that the incidence of respiratory system diseases is much less among females than among males, the former being, as it would appear, less susceptible to infection.

Digestive system diseases come next with a total of 2,701 cases. The greater part of these were parasitic diseases, numbering 668 cases consisting of 323 dysentery, 123 ascariis, 116 ancylostoma and 106 bilharziasis cases.

There were 648 cases of diseases of the liver. Among these, 144 suffered from hepatitis, 139 from catarrhal jaundice and 228 from subacute necrosis of liver.

There were 474 cases suffering from diseases of the peritoneum inclusive of 350 cases of ascitis and 113 cases of T.B. peritonitis.



Cases suffering from diseases of the cardiovascular system numbered 3,226 inclusive of 861 cases of congestive heart failure, 164 cases of mitral valve diseases, 279 cases of rheumatic heart diseases, 278 cases of cardiovascular aortic valve diseases, 457 cases suffered from diseases of the vessels. Of these, 406 had high blood pressure. Next come diseases of the urogenital system with a total of 919 cases. Of these 404 cases suffered from generalised symptomatic diseases including 148 cases of urinary billarziasis; 405 cases suffered from diseases of the kidney and ureters including 277 cases of nephritis. Central nervous system diseases totalled 1,674 cases including 395 cases of hemiplegia and 146 cases of myelitis.

1,248 cases were treated for diseases of the blood lymphatics and spleen. Of these, 390 cases had anaemia due to iron deficiency and 139 cases had parasitic anaemia. There were, besides, 404 cases of hepatosplenomegaly and Egyptian splenomegaly and 131 cases of splenomegaly.

893 cases were treated for diseases of the metabolism and endocrine glands. These included 261 cases of diabetes mellitus and 343 cases of pellagra.

440 cases were treated for diseases of the joints and bones including 89 cases of osteoarthritis and 87 cases of arthritis rheumatoid.

A total of 5,342 cases were treated in the casualty department as against 4,519 in the previous year, an increase of 823 cases or 18 per cent over last year.

Table No. 100 gives details of casualty cases and deaths of the last nine years compared with those of other departments and the death rates to total hospital patients.

TABLE No. 100

Year	Casualty Cases	Casualty Deaths	Death Rate %	Total Pt's F.I.H.	Total Deaths F.I.H.	%	Casualty case rates to total Department in F.I.H.
1937 ... ..	4,539	95	2.1	11,844	741	6.2	38.3
1938 ... ..	5,324	105	2	14,408	904	6.2	37
1939 ... ..	4,692	141	3	14,677	905	6.4	33.3
1940 ... ..	4,919	109	2.3	15,606	926	5.2	28
1941 ... ..	5,202	119	2.8	15,905	1,018	6.4	32.8
1942 ... ..	5,205	149	2.2	16,882	1,091	5.6	27
1943 ... ..	4,826	105	2.2	18,276	893	4.9	26.4
1944 ... ..	4,519	138	3.1	19,495	1,027	5.3	23.1
1945 ... ..	5,342	117	2.2	21,358	1,011	4.7	25

These figures are significant of the apparent increase in the number of patients year after year. The number of patients during 1944 was 19,495. It was 21,358 in 1945 an increase of 1,863 patients or 10 per cent of their number in the previous year. Against this, there is a steady fall in deaths. In 1945, the death rate was 4.7 per cent the lowest recorded since 1937. The casualty death rate fell to 2.2 per cent or 1 per cent less than in 1944; an indication of the faithful efforts of the medical and nursing staff.

#### OUT-PATIENT DEPARTMENT

There were 1,025,140 new patients and 332,540 old patients treated during the year in the out-patient department, i.e. a total of 1,357,680 or 31,680 patients (6,393 new and 25,287 old) less than in the previous year. The decrease affected the surgical, ophthalmic, ear, nose and throat, dermatology and gynaecology departments. There was, however, a marked increase in the medical, neurological, tropical diseases, chest, urological and orthopaedic departments.

The following table No. 101 is a comparative statement of the patients treated in the various out-patient departments during 1944 and 1945:-

TABLE No 101

Section	1944			1945		
	New Patients	Old Patients	Total	New Patients	Old Patients	Total
Medical ... ..	104,273	194,706	298,979	101,071	262,619	363,690
Neurological ... ..	6,018	19,620	25,638	7,506	26,417	33,923
Tropical ... ..	5,349	16,715	22,064	7,677	26,150	33,827
Chest Diseases ... ..	3,461	14,540	18,001	3,720	16,322	20,042
Surgical ... ..	52,895	164,448	217,343	53,492	137,411	190,903
Urological ... ..	2,217	4,580	6,797	2,897	8,551	11,448
Orthopaedic ... ..	4,190	11,048	15,238	4,424	16,281	20,705
Gynaecological ... ..	18,658	72,240	90,898	20,047	56,232	76,279
Obstetric ... ..	3,185	7,513	10,698	2,676	3,760	6,436
Ophthalmic ... ..	36,608	154,310	190,918	34,921	137,108	172,029
Ear, Nose and Throat ...	19,623	94,027	113,650	19,043	92,008	111,051
Dermatology ... ..	47,460	158,904	206,364	43,625	143,055	186,680
Venereal ... ..	6,425	90,636	97,061	4,874	57,924	62,798
Dental ... ..	28,571	47,140	75,711	26,567	41,302	67,869
GRAND TOTAL ... ..	338,933	1,050,427	1,389,360	332,540	1,025,140	1,357,680

This table shows that the medical diseases department was the most congested with 101,071 new and 262,619 old patients or 26·7 per cent of all out-patients. The surgical department comes next with 53,492 new and 137,411 old patients and a ratio of 14 per cent of total out-patients.

The dermatological departments had 43,625 new and 143,055 old patients or a ratio of 13·7 per cent. The ophthalmic department had 34,921 new and 137,108 old patients a ratio of 12·6 per cent. In the dental department, 28,571 new and 47,140 old patients were treated. Among the new patients 4,809 conservative, 13,054 extractions including 2,277 infants, and 1,124 prosthetics were carried out. 7,028 prosthetics were carried out to old patients. Other treatments totalled 16,703—7,580 new and 9,123 old.

### Kasr el-Ainy Hospital

A total of 22,822 patients were admitted into hospital during 1945 or 701 patients more than last year. This increase was mainly in the surgery and orthopaedic departments, a total of 16,019 patients were treated in the former and 945 in the latter as compared with 15,353 and 859 respectively in 1944. Of the 22,822 patients, 14,236 were males and 8,586 or 38 per cent females.

Casualties involved in car and tram accidents, fires, quarrels, etc., numbered 5,547 as against 5,335 in the previous year, or an increase of 212 cases. Of these, 4,061 were grown ups—3,065 males and 996 females; and 1,486 children—546 females and 940 males. 4,746 cases were discharged from hospital cured or improved, 720 cases died—191 cases or 13·2 per cent of total casualties were children. It is worthy of mention that a good number of casualties arrive in a grave or hopeless condition.



Falls from height had the greatest toll with 1,311 casualties followed by motor car accidents with 993 casualties, burns with 962 casualties and tram accidents with 470.

The number of patients admitted into the surgery department, including casualties, was 16,019. Orthopaedic department had 945, ophthalmic department had 1,815, ear, nose and throat department had 1,073, gynaecology department had 473 patients and obstetric department had 2,507 patients.

14,167 patients were discharged cured or improved, 6,280 patients were transferred to the out-patient department and 154 to other hospitals for further treatment.

1470 deaths were recorded or 6.6 per cent of the total discharges totalling 22,071 patients.

Most of the deaths, 1,349 out of 1,470, occurred in the surgery department.

### **Fouad I Children Hospital, Mounira**

No change took place this year in the hospital accommodation. The number of beds during 1945 remained the same as in the previous year, namely 161 beds. These were reserved for the treatment of medical and surgical diseases, ear, nose and throat and dental diseases. Most of the beds, 118, were occupied by medical diseases cases. The number of new patients during the year was 2,520 (1,473 males and 1,047 females) distributed as follows: 2,057 patients in the medical diseases sections, 285 in the surgery section, 135 in the ear, nose and throat section and 43 in the dental section.

June was the most congested month with a maximum of 260 patients while November was the least with a minimum of 147 patients. 2,501 patients were discharged as improved or transferred to the out-patient department or other hospitals for further treatment. This number also includes 500 deaths or a ratio of 20 per cent as compared with 22 per cent during the last three years.

Among the diseases treated, there were 119 cases of atrophy, 247 cases of septic dyspepsia, 235 cases of leucopenia, and 138 cases of nutritive and parasitic anaemia.

85 cases were treated in the in-patient ophthalmic section. These consisted of 19 cases of leucoma, 17 corneal ulcer and 10 cases of diseases of the conjunctiva. Of the surgical diseases treated, there were 19 cases of cystitis and 48 cases of hernia. Of the diseases of the bones, there were 19 cases of osteomyelitis, 11 cases of malformation and 10 cases of arthritis. Besides, there were 12 cases of abscesses and 12 cases of lymphadenitis.

### **Children Hospital Out-patients Department**

The total number of patients treated during the year in the out-patients department was 571,855 consisting of 287,214 new and 284,641 old patients. The number of new patients shows an increase of 10,444 patients over last year, whereas the old patients show a decrease.

Diseases of the intestines are still the predominant amongst children. These numbered 84,237 new patients, 66,980 of whom had dyspepsia and diarrhoea. There were 43,574 respiratory system diseases cases including 34,020 cases of bronchitis. Some 21,210 children suffered from infectious diseases including 4,891 cases of whooping cough, 1,446 measles, 587 mumps, 329 chicken pox and 222 typhoid cases. July was the most congested month and February the least. Perhaps climatic changes have much to do with this phenomenon.

### **Farouk I University Hospitals, Alexandria.**

#### **CENTRAL HOSPITAL AND SHATBY ANNEX**

With the exception of four beds added to the ophthalmic department bringing their number to 331 beds, the hospital accommodation did not undergo any change during 1945.

The total number of beds were 526 in the Central Hospital and 116 in Shatby annex. A total of 15,428 patients (10,404 males and 5,042 females) were admitted during the year for treatment. These were distributed according to departments as follows: 6,548 surgery, 4,490 medical diseases, 86 urogenital system, 1,285 surgical affections of bones, 82 dental, 336 ear, nose and throat, 486 ophthalmology, 1,002 dermatology and 1,140 gynaecology and obstetric departments.

15,278 patients were discharged cured, improved or at their own request. There were, 457 deaths (374 males and 83 females). A total of 8,347 surgical operations were performed throughout the year.



## OUT-PATIENT DEPARTMENT

A total of 698,078 out-patients (213,453 new and 484,625 old) were treated this year with an increase of 55,050 patients over last year.

Of this number, 153,131 patients (20,726 new and 132,405 old) were treated in the surgery department and 147,016 patients (86,562 new and 60,454 old) were treated in the medical diseases department.

The ophthalmic department was the most congested. A total of 246,097 patients (30,150 new and 215,947 old) were treated therein during the year.

## QUEEN, NAZLY CHILDREN HOSPITAL

The in-patient department of this hospital is reserved for the treatment of medical diseases only. 534 children were treated during the year. The number of beds remained the same as last year.

## CHILDREN OUT-PATIENT DEPARTMENT

Again the out-patient department deals with medical diseases only. Some 84,13 new and 6,744 old patients were treated during the year. Besides, 3532 were admitted for relief and 3,886 foundlings.

## Appendix II.—MEDICAL PERMITS

TABLE No. 102 -SHOWING THE NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1945 AS COMPARED WITH THAT OF THE YEAR 1944

Profession	At the end of 1944	At the end of 1945
Medical Practitioners ... ..	4,032	4,139
Veterinary Surgeons ... ..	490	501
Dental Surgeons ... ..	116	122
Dentists without diplomas* ... ..	121	19
Pharmacists ... ..	1,052	1,089
Asst. Pharmacists* ... ..	333	332
Midwives ... ..	751	810

\* Permits are no longer issued to persons of these two categories.

TABLE No. 103.—SHOWING THE NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS IN EGYPT DURING THE LAST FIVE YEARS

Profession	1941	1942	1943	1944	1945
Medical Practitioners ... ..	139	158	115	10	15
Veterinary Surgeons ... ..	8	29	28	4	12
Dental Surgeons ... ..	13	13	10	17	9
Pharmacists ... ..	43	4	43	25	4
Midwives ... ..	45	43	25	3	9
ayas } Green Permits ... ..	197	193	276	77	147
} White Permits ... ..	2	1	3	2	2
barbers ... ..	9	3	11	5	14



TABLE NO. 104.—SHOWING THE ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN PRACTITIONERS WHO WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1945

Profession	Universities											
	Cairo	Alexandria	German	Swiss	British	Lebanese	Italian	French	Turkish	Austrian	Belgian	Total
Medicine ... ..	104	8	2	2	9	1	1	16	1	3	1	148
Veterinary ... ..	12	—	—	—	—	—	—	—	—	—	—	12
Dentistry ... ..	5	—	—	—	—	3	—	1	—	—	—	9
Pharmacy ... ..	34	—	—	3	3	4	—	1	—	1	—	46
Midwifery ... ..	59	—	—	—	—	—	—	—	—	—	—	59

TABLE NO. 105.—SHOWING THE RESULT OF THE STATE EXAMINATIONS HELD DURING 1945 FOR MEDICAL PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS FOR THE PURPOSE OF RECORDING THEIR NAMES IN THE MINISTRY'S REGISTERS.

Examination	Number	Egyptians .		Foreigners		Total	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine ... ..	38	2	18	1	17	3	35
Pharmacy ... ..	14	4	8	1	1	5	9
Dentistry ... ..	19	4	12	—	3	4	15

TABLE NO. 106.—SHOWING THE ORIGIN OF MEDICAL DIPLOMAS THE HOLDERS OF WHICH WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1945.

Profession	Cairo	Alexandria	Austria	Switzerland	England	Lebanon	Italy	France	Greece	Turkey	Belgium	Germany	Total
Medicine ... ..	104	8	3	2	10	1	1	17	1	1	1	2	141
Veterinary Surgery ... ..	12	—	—	—	—	—	—	—	—	—	—	—	12
Dental Surgery ... ..	5	—	—	—	—	3	—	1	—	—	—	—	9
Pharmacy ... ..	34	—	1	3	3	4	—	1	—	—	—	—	46
Midwifery ... ..	59	—	—	—	—	—	—	—	—	—	—	—	59

TABLE NO. 107— SHOWING THE NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1945

Profession	Egyptians	Greeks	British	Total
Medical Practitioners ... ..	108	2	1	151
Veterinary Surgeons ... ..	12	—	—	12
Dental Surgeons ... ..	9	—	—	9
Pharmacists ... ..	44	1	1	46
Midwives ... ..	59	—	—	9

### Appendix III

## REPORT ON THE WORK OF THE CENTRAL PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS

#### *The Central Medical Commission.*

The number of medical certificates issued by the Central Medical Commission during 1945 was 24,749, i.e. 1,849 certificates more than in 1944, despite the extension of the attributions of Medical Commissions in Governorates and Provinces to cover the granting and approval of sick leaves up to 60 days and the invaliding out of service of temporary officials and hors cadre employees and daily paid staff without further reference to the Medical Commission for final sanction.

Of this number, 12,751 candidates for Government service or educational missions abroad were examined by the Central Medical Commission. These consisted of 5,822 candidates for permanent or temporary service, 434 for educational missions and 6,495 hors cadre posts.

63.5 per cent of the first group and 48 per cent of the last group passed the medical examinations successfully. Of the 36.5 per cent failures in the first group, 23.5 per cent failed in vision, myopia accounting for most of them ; 7.5 per cent for defects of the urinary system — albumin or traces thereof being the main cause ; 1.3 per cent for heart diseases — with incompetency of the heart as the main complaint, and 4.2 per cent for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases. Of the 51.2 per cent failures in the last group, 32.6 per cent failed in vision — myopia accounting for most of them ; 10.3 per cent for defects of the urinary system—albumin or traces thereof being the main cause ; 1.1 per cent for heart diseases with incompetency of the heart as the main complaint, and 7.2 per cent for other diseases, e.g. varicoceles, hydroceles, not treated or removed by operation, deformation, debility, flat foot or respiratory diseases.

A total of 8,153 medical certificates dealt with sick leaves granted to Government officials reporting sick. These consisted of 5,617 pensionable and temporary officials and 2,536 hors cadre employees.

Of those granted sick leaves by the Central Medical Commission or by the Cairo Medical Officers of Health and approved by the Central Medical Commission, 3,128 pensionable and temporary officials and 848 hors cadre employees were found suffering from medical diseases and 1,686 pensionable and temporary officials and 825 hors cadre employees were found suffering from surgical and ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and the ratio of their prevalence :—

TABLE No. 108

Disease	Pensionable and Temporary Officials		Hors Cadre Employees	
	Number	Percentage to the Total	Number	Percentage to the Total
Nose and Larynx ... ..	183	3.8	53	3.2
Bronchi and Lungs ... ..	209	5.6	89	5.4
Heart and Blood Circulatory System ... ..	430	8.9	90	5.4
Stomach and Intestines ... ..	98	2.1	21	1.3
Liver ... ..	252	5.2	41	2.5
Kidney and Cystitis ... ..	176	3.4	50	2.9
Neurasthenia and Mental Diseases ... ..	194	4.0	23	1.6
Nervous System ... ..	117	2.4	27	1.6
Anaemia and General Debility ... ..	478	9.9	139	8.4
T.B. ... ..	304	6.3	150	9.0
Syphilis ... ..	—	—	2	— .1
Rheumatism ... ..	323	6.7	80	4.9
Fevers ... ..	142	2.9	39	2.3
Other Medical Diseases ... ..	171	3.5	39	2.3
Eye and Dental Diseases ... ..	165	3.4	32	1.8
Appendicitis ... ..	41	0.9	12	0.6
Urinary System and Stones ... ..	48	1.0	8	0.4
Various Surgical Operations ... ..	928	19.5	532	31.8
Fractures ... ..	131	2.9	135	8.2
Minor Surgical Operations (fistula, piles, hernia and hydroceles)	27	4.5	47	2.9



41,676 officials and employees were granted from 1–10 days sick leave by Cairo Medical Officers of Health and by Markaz and Sanitary Outposts in all the Provinces and Governorates during the year 1945. Of these 31,368, or 75.2 per cent, suffered from medical diseases; 7,583 or 18.2 per cent, suffered from surgical diseases; and 2,725, or 6.6 per cent, suffered from ophthalmic diseases. The total number of days of sick leave granted to the pensionable and temporary officials only amounted to 116,478.

1,486 pensionable and temporary officials and 676 hors cadre employees in Cairo only were granted from 1–10 days sick leave by the Central Medical Commission or by Cairo Officers of Health. 384 pensionable and temporary officials and 181 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

932 pensionable and temporary officials and 1,020 hors cadre employees were examined by other Provincial and Governorate Medical Commissions but were not granted any sick leave.

3,328 pensionable and temporary officials and 997 hors cadre employees were granted from 11 to 30 days sick leave and over by the Central Medical Commission and by Cairo Medical Officers of Health.

The Central Medical Commission granted 37 pensionable and temporary officials longer sick leaves terminating by their retirement on pension; and pronounced 240 hors cadre employees medically unfit for further service. 23 pensionable and temporary officials and 55 hors cadre employees were pronounced fit for further service.

#### *Medical Examination of Private and Passenger Pilots.*

Of 120 candidates for private pilot licence "A" examined by the Central Medical Commission during 1945, 88 were found fit (73 in the first examination, 14 in the second and 1 in the third examination). 26 of the 32 failures were examined once and 6 were examined twice.

10 candidates for passenger pilot licence "B" were examined and all were found fit in the first examination.

Out of 105 private pilots examined for renewal of licences, 93 were found fit (87 in the first examination and 6 in the second examination). 11 of the failures were examined once and one was examined twice.

71 passenger pilots were examined for renewal of licences and all were found fit in the first examination.

#### *Provincial and Governorate Medical Commissions.*

A total of 40,790 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year 1945, i.e. an increase of 54 certificates over those of last year.

TABLE No. 109 -SHOWING CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES FOR WHICH SICK LEAVES HAVE BEEN GRANTED BY THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS AND BY THE DISTRICT M.O.S. IN CAIRO AND APPROVED BY THE C.M.C. DURING THE YEAR 1945.

# DISASTERS

Surgical and Ophthalmic Diseases	Total		H. C.		P. & T.		825		4 234		5 059	
	1	Eye Diseases	H. C.	P. & T.	165	59	49	13	227	206	392	265
	2	Ear Diseases	H. C.	P. & T.	41	13	49	13	63	43	112	56
	3	Appendicitis	H. C.	P. & T.	12	39	12	41	40	52	52	94
	4	Hernia	H. C.	P. & T.	12	39	70	12	96	55	108	156
	5	Fistulae	H. C.	P. & T.	9	97	9	9	62	86	61	272
	6	Piles	H. C.	P. & T.	18	97	18	18	133	175	151	46
	7	Hydroceles	H. C.	P. & T.	11	8	11	8	35	31	39	188
	8	Urinary System and Stones	H. C.	P. & T.	48	8	48	8	80	92	100	3 041
	9	Other Surgical Operations	H. C.	P. & T.	958	632	958	632	859	2,609	1,797	3 377
	10	Fractures	H. C.	P. & T.	131	135	131	135	246	1000	1 135	3 655
11	Dental Diseases	H. C.	P. & T.	19	97	19	97	32	91	51	1 284	
Medical Diseases	Total		H. C.		P. & T.		3,128		4,591		7,719	
	1	Nose and Larynx	H. C.	P. & T.	53	269	53	269	100	658	153	921
	2	Bronchi and Lungs	H. C.	P. & T.	89	430	89	430	564	396	653	826
	3	Heart and Cir. System	H. C.	P. & T.	50	98	50	98	185	413	215	511
	4	Stomach and Intestines	H. C.	P. & T.	21	21	21	21	266	266	287	518
	5	Liver	H. C.	P. & T.	41	252	41	252	149	321	190	488
	6	Kidney and Cysts	H. C.	P. & T.	60	60	60	60	210	253	260	305
	7	Nervousness	H. C.	P. & T.	7	7	7	7	121	3	128	145
	8	Mental Diseases	H. C.	P. & T.	21	142	21	142	5	44	28	161
	9	Anaemia and General Debility	H. C.	P. & T.	27	27	27	27	27	27	54	1,106
	10	Nervous System Cereb. and Cord	H. C.	P. & T.	139	478	139	478	683	628	722	424
	11	T. B.	H. C.	P. & T.	150	304	150	304	124	120	274	8
	12	Syphilis	H. C.	P. & T.	2	2	2	2	100	616	102	9 9
	13	Rheumatism	H. C.	P. & T.	80	323	80	323	410	310	490	452
	14	Fevers	H. C.	P. & T.	39	142	39	142	459	375	498	546
15	Other Medical Diseases	H. C.	P. & T.	39	171	39	171	336	375	375	4,487	
General Medical Commission Cairo.		H. C.		P. & T.		183		180		363		
Other Governorate and Provincial Commissions		H. C.		P. & T.		269		100		153		
TOTAL		H. C.		P. & T.		4,487		3,639		8,126		

*N.B.*—P. = Pensionable. T. = Temporary. H.C. = Hors Cadre.

N.B.—P. = Pensionable.

T. = Temporary.

H.O. — Hors Cadre.





## Appendix IV

### CENTRAL STORES

The function of the Central Stores is to equip and supply new hospitals and other Public Health Units with modern medical equipment and apparatus and to maintain existing units.

The Central Stores have during the year furnished and equipped the following new units :—

1. Four in-patient Sections within Chest Diseases Dispensaries.
2. Two Health Offices in Cairo City.
3. Two Chest Diseases Dispensaries provided with in-patient departments.
4. An Isolation Section for advanced cases.
5. Three dental clinics.
6. One dental clinic at Suez.
7. Supply and equipment of three more beds in Assiut Chest Diseases dispensary.
8. Supply and equipment of 20 more beds in Fayoum Chest Diseases dispensary.
9. Increase of accommodation in Tewfikieh Endemic Diseases Hospital.
10. Ophthalmic Hospital at Tahta.
11. Three Health Offices in provinces.
12. Two venereal and skin diseases clinics at Cairo.
13. Three venereal and skin diseases clinics in the Provinces.
14. Venereal diseases Prophylactic Centre at the Ezbekieh Garden, Cairo.
15. Two Child Welfare Centres within two nurseries at Cairo.
16. Two nurseries at Cairo.
17. A new mobile out-patient leprosy clinic with an isolation section and four branches
18. Two mobile units for the enumeration and examination of lepers.
19. Two permanent malaria stations in Lower Egypt.

The following table No.113 shows the work of the Central Stores during the year 1945 :—

TABLE NO. 113

Kind of Work	Number
Receipt vouchers ... ..	18,803
Issue vouchers ... ..	6,440
Claims... ..	2,411
Outward letters ... ..	183,266
Inward letters ... ..	147,943
Postal parcels issued ... ..	11,461
Postal parcels received ... ..	2,821
Railway parcels despatched ... ..	47,639
Railway Con ignments received ... ..	26,278
Repairs Carried out by central Stores Workshops ... ..	83,057
New works carried out by Central Stores Workshops ... ..	109,429



The following are the new units opened during 1945:—

1. Three dental clinics at Damietta, Benha and Kafr el Sheikh hospitals.
2. One Chest Diseases dispensary including 20-bed inpatient Department at Aswan.
3. Three child Welfare Centres at Abbassia, Kafr el Dawar and Sherbin.
4. One nursery at the Child Welfare Centre at Sayeda Zenab.
5. Three Venereal Diseases clinics at Abbassia, Menouf and Damietta.
6. One Health Office at Adawieh.
7. The increase of number of beds in the endemic diseases hospital at Tewfikieh (Behera province) from 20 to 40 beds.
8. Inauguration of the out-patient department at the Ophthalmic Hospital at Tahta.
9. Inauguration of the inpatient department of the Ancylostoma Hospital No. 10 at Quesna.
10. Inauguration of the in-patient department of the Chest Diseases dispensary at Minia.

The following table No. 114 gives the number of contracts concluded during 1945:—

Kind of Work	Number
General adjudications ... ..	94
Local adjudications ... ..	85
Contracts ... ..	575
Local intents ... ..	322
Foreign intents ... ..	54
Forms 50 <i>C.G.</i> ... ..	3 641
Subjects submitted to the contract board ... ..	1,873
Number of meetings held by the contract board ... ..	119
Tenders submitted in general adjudications ... ..	1, 33
Agreements ... ..	4
Miscellaneous intents ... ..	148
Tenders submitted in local adjudications ... ..	637
Purchases performed by bargain ... ..	14

## Appendix V

### BUDGET

TABLE NO. 115 — DETAILS OF BUDGET GRANTS

	Budget Grants		Actual Expenditure	
	1944	1945	1944	1945
	L.E.	L.E.	L.E.	L.E.
TITLE I				
Salaries, Wages and Allowances ... ..	1,094 378	1,2 6,837	1, 71,608	1,2 6,618
TITLE II				
General Expenditure ... ..	1,501,500	1,8 8,300	1,476,012	1,743,119
TITLE III				
New Works ... ..	264,720	792,200	132,603	268,658
TOTAL ... ..	2,861,598	3,897,337	2,680,223	3,238,395

\* An additional credit of L.E. 100,000 was granted to meet increased expenditure under title II.





TABLE No. 117—DETAILS OF BUDGET GRANTS AND EXPENDITURE OF UNIVERSITIES HOSPITALS

	Fouad 1st University Hospitals				Farouk University Hospitals				Expenses
	Budget Grants		Actual Expenditure		Budget Grants		Actual Expenditure		
	1944	1945	1944	1945	1944	1945	1944	1945	
TITLE I									
Salaries, Wages and Allowances ... ..	113,890	127,812	101,393	129,738	34,530	38,526	25,876	31,056	
TITLE II									
General Expenditure ... ..	321,900	371,100	347,978	418,367	60,600	71,800	73,712	902	
TITLE III									
New Works ... ..	14,000	15,000	2,353	28	4,500	28,200	1,034	23,174	
TOTAL ... ..	449,790	513,912	451,724	548,133	99,630	138,526	100,622	144,518	



TABLE No. 118

	Fouad 1st Hospitals		Faiouk 1st Hospitals		Total	
	1944	1945	1944	1945	1944	1945
Technical Post:						
Permanent. ... ..	93	88	18	20	111	108
Temporary.... ...	237	215	80	78	319	293
Adm. and Clerical Pos's. ...	40	40	11	11	5	51
Temporary ... ..	8	8	—	—	8	8
Hors Cadre Personnel ... ..	1,342	1, 56	29	90	1,632	1,646
<b>TOTAL</b>	<b>1,722</b>	<b>1,701</b>	<b>399</b>	<b>399</b>	<b>2,111</b>	<b>2,106</b>

## Appendix VI—SUMMARY OF A REPORT ON THE STATE OF PUBLIC HEALTH, ALEXANDRIA,

TABLE No. 119.—SHOWING POPULATION, BIRTHS, DEATHS, AND INFANTILE DEATHS IN THE DIFFERENT QISMS OF THE CITY OF ALEXANDRIA DURING 1945.

Qism	No. of Inhabitants	No. of Births	No. of Deaths	Infantile Mortality
Gumrok ... ..	110,000	5,257	3,110	1,373
Manshieh ... ..	20,000	1,201	724	342
Labbane ... ..	56,500	2,887	1,869	737
Attarine ... ..	61,400	2,532	2,522	637
Minet el Bassal I ... ..	55,400	3,927	1,842	811
Minet el Bassal II ... ..	30,300	1,975	1,368	571
Karmouz I... ..	88,500	4,695	3,052	1,351
Karmouz II ... ..	92,500	6,131	3,417	1,559
Moharrem Bey ... ..	53,800	4,418	2,610	773
Hadra ... ..	91,700	5,158	3,331	1,026
Ramleh I ... ..	17,500	3,227	2,046	789
Ramleh II ... ..	20,900	1,520	1,015	394
<b>TOTAL ... ..</b>	<b>768,500</b>	<b>42,928</b>	<b>26,896</b>	<b>10,368</b>

TABLE NO. 120 — SHOWING THE NUMBER OF CASES AND DEATHS OF  
INFECTIOUS DISEASES IN THE CITY OF ALEXANDRIA DURING 1945

Infectious diseases	No. of Cases	No. of Deaths
Typhus ... ..	509	86
Cerebro-Spinal Fever ... ..	11	6
Typhoid and Paratyphoid ... ..	1,075	140
Scarlet Fever ... ..	4	—
Diphtheria ... ..	366	114
Measles ... ..	767	138
Whooping Cough ... ..	64	4
Mumps ... ..	200	—
Malaria ... ..	403	5
Erysipelas ... ..	377	15
Tetanus ... ..	65	34
Tuberculosis ... ..	1,491	827
Chicken Pox ... ..	223	4
Influenza ... ..	4,408	10
Puerperal Fever ... ..	105	12
Dysentery ... ..	226	13
Pneumonia and Broncho-pneumonia ... ..	2,354	1,910
Leprosy ... ..	48	—
Undulant Fever... ..	5	—
Rabies ... ..	2	2
Encephalitis lethargica ... ..	1	—
Relapsing Fever ... ..	2,420	100
Acute Poliomyelitis ... ..	10	—
Small Pox ... ..	133	13
<b>TOTAL ... ..</b>	<b>15,267</b>	<b>493</b>



## Appendix VII.

### REPORT ON THE WORK OF CAIRO CITY HEALTH INSPECTORATE

The estimated mid-year population of Cairo in 1945 was 1,477,500.

The following is the distribution of this population in the different Qisms :—

Heliopolis	...	...	...	...	...	...	...	...	58,900
Zeitoun	...	...	...	...	...	...	...	...	46,200
Abbassia	...	...	...	...	...	...	...	...	133,200
Ezbekia	...	...	...	...	...	...	...	...	59,800
Rod el Farag	...	...	...	...	...	...	...	...	137,200
Shubra	...	...	...	...	...	...	...	...	101,000
El Sharabia	...	...	...	...	...	...	...	...	41,900
Gamalia	...	...	...	...	...	...	...	...	85,800
Bab el Sharia	...	...	...	...	...	...	...	...	100,300
Abdine	...	...	...	...	...	...	...	...	93,300
Mouski	...	...	...	...	...	...	...	...	29,300
Darb el Ahmar	...	...	...	...	...	...	...	...	92,200
Khalifa	...	...	...	...	...	...	...	...	82,400
Sayeda I	...	...	...	...	...	...	...	...	73,400
Sayeda II	...	...	...	...	...	...	...	...	70,100
Bulac I	...	...	...	...	...	...	...	...	85,900
Bulac II	...	...	...	...	...	...	...	...	56,700
Old Cairo	...	...	...	...	...	...	...	...	75,300
Helwan	...	...	...	...	...	...	...	...	54,600
Total for Cairo									<u>1,477,500</u>

#### *Births.*

The total number of births (excluding still-births) registered during the year was 90,063 or a birth rate of 609 per thousand of population. This number is 4,362 more than last year.

The number of still-births registered during the year was 2,069 or a ratio of 22·86 per thousand births compared with 1,727 during 1944, 1,627 during 1943 and 1,530 in 1942.

#### *Deaths.*

During 1945, a total of 51,677 deaths were registered of which 1,808 occurred amongst non-residents of Cairo, leaving 49,869 deaths for Cairo proper. This number is 2,865 less than the previous year. This gives an annual death-rate of 33·9 per thousand of population, as compared with 36·2 in 1944, 37·4 in 1943 and a mean death-rate of 31·1 per thousand during the 5 years (1939-1943).

#### *Infantile Mortality.*

The total number of deaths of children under one year of age was 18,751 with an excess of 339 over the previous year. This gives an infantile mortality rate of 208 per thousand births as compared with 214·8 in 1944, 235·7 in 1943 and a mean infantile mortality rate of 315 per thousand births during the 5 years (1939-1943).

Infantile deaths constitute 37·6 per cent of the total Cairo deaths.

### *Causes of Infantile Mortality.*

Diarrhoea and enteritis figure foremost on the list of diseases affecting children. They were responsible for 9,851 deaths or 52.5 per cent of the infantile deaths (18,751). Marasmus and general debility come next with 5,603 deaths or 29.9 per cent, followed by respiratory diseases with 999 deaths or 5.3 per cent (excluding deaths from Br. Pn. and lobar Pn.), infectious diseases (including Br. Pn. and lobar Pn. with 670 deaths or 3.6 per cent, infantile deaths and other diseases with 1,628 deaths or 8.7 per cent

### *Death Inquiries.*

The total number of uncertified deaths requiring investigation during the year 1945 was 26,691 or 53.52 per cent of the total of Cairo deaths.

Table No. 121 shows the distribution of these deaths in the various Qisms and their rates to total Deaths.

District Medical Officers of Health investigated 8,042 or 30.13 per cent of the total number of the uncertified deaths. District mid-wives investigated 17,554 or 65.7 per cent. The remaining deaths occurred in villages surrounding Cairo and were examined by sanitary barbers and dayas.

### *Infectious Diseases.*

The total number of cases of infectious diseases notified in Cairo City during 1945 was 20,627 and 1,749 cases from outside Cairo, as compared with 20,287 cases in 1944 and 27,771 cases in 1943. Cairo deaths from infectious diseases during 1945 numbered 5,272. This gives a ratio of 10.4 per cent of the total deaths of Cairo, as compared with 13.2 per cent of deaths in 1944 and 15.8 per cent in 1943.

Table No. 122 shows the incidence of the most prevalent infectious diseases in Cairo Districts.

### *Typhoid.*

The total number of typhoid cases notified during the year 1945 was 3,145 with 394 deaths or a ratio of 2.128 and 0.273 respectively per thousand of population. The highest incidence was in Heliopolis district with Sayeda II following.

The average incidence and mortality were slightly higher than last year when 2889 cases with 368 deaths were recorded or a case-rate of 1.983 and a death-rate of 0.252 per thousand of population.

The total number of persons vaccinated against typhoid during the year 1945 was 202,017.

### *Diphtheria.*

A total of 1,844 cases of diphtheria with 409 deaths were notified during the year 1945 or a case-rate of 1.248 and a death-rate of 0.276 per thousand of population as compared with 1,435 cases with 400 deaths and a case-rate of 0.985 and a death-rate of 0.229 per thousand of population during 1944.

The highest incidence was at Sayeda I, then Sayeda II, Abbassia and Khalifa.

The rise in the incidence of diphtheria began from the week ending April 29, 1945 and continued till the end of the year.

### *Anti-Diphtheria Vaccination.*

The number of children given 3 injections against diphtheria during this year was 58,923.

### *Measles.*

508 cases of measles with 216 deaths were notified during the year or a case-rate of 0.343 and a death-rate of 0.146 per thousand of population as compared with 1,366 cases with 761 deaths in 1944.



### *Typhus.*

1,300 cases with 298 deaths were notified during the year or a case-rate of 0·873 and a death-rate of 0·201 per thousand of population, as compared with 1,784 cases with 420 deaths during 1944 and 8,652 cases with 1,868 deaths during 1943.

This shows a falling off in the incidence of this disease as compared with the previous two years.

### *Vaccination against Typhus.*

The number of persons immunized against typhus were as follows : 27,211 received one injection, 20,494 received two injections and 16,934 received three injections.

### *Specimens taken for Weil Felix Reaction.*

All specimens taken by Medical Officers of Health for Weil Felix examination numbering 123 from dead persons and 617 from alive gave negative results.

### *Small-Pox.*

121 cases of small-pox with 6 deaths were notified during the year or a case-rate of 0·081 and a death-rate of 0·004 per thousand of population, as compared with 1,283 cases with 83 deaths in 1943 and 2,288 cases with 129 deaths in 1944. This shows that the 1943 small-pox epidemic reached its peak in 1944 and fell off in 1945.

### *Anti-Small-Pox Vaccination.*

A house to house general vaccination against small-pox was carried out in 1943. The work began on January 30, 1943, and continued till November 20, 1943. The total number vaccinated was 1,815,088.

Owing to the persistence of the epidemic during 1944, a general re-vaccination had to be carried out during the year. It began on March 11, 1944, and ended on August 12, 1944. The total number vaccinated against small-pox was 1,930,690.

In 1945, arrangements were made to carry out a general vaccination of Cairo City once every three years. A third of the population would be vaccinated each year. Vaccination was started this year on December 4, 1945, in Helwan, Maadi, Old Cairo, Sayeda I and Sayeda II.

### *Relapsing Fever.*

2,404 cases with 52 deaths of relapsing fever were notified this year or a case-rate of 1·627 and a death-rate of 0·003 per thousand of population.

No relapsing fever cases were recorded in Cairo City since 1923. On February 21 1945, cases were imported from Zat el Kom village, Giza Mudiria, by workmen employed in Cairo factories and also by labourers arriving from the Canal Zone. From April 22, 1945, the disease took an epidemic form spreading to the various Qisms of the City reaching its peak on August 29, 1945.

Thereafter, the disease began to subside only to start another and more severe outbreak on December 16, 1945.

### *Cerebro-Spinal Fever.*

36 cases with 23 deaths were recorded during the year or a case-rate of 0·024 and a death-rate of 0·015 per thousand of population as compared with 92 cases with 24 deaths during 1944.

### *Scarlet Fever.*

Only 3 cases with no deaths were recorded during this year or a case-rate of 0·002 per thousand of population as compared with 7 cases in 1944 and 22 cases in 1943.

### Influenza.

The total number of cases notified during 1945 was 2,604 with 8 deaths or a case-rate of 1·8 and a death-rate of 0·005 per thousand of population as compared with 1,823 cases with 22 deaths and ratios of 1·2 and 0·015 per thousand respectively during 1944 and 2,240 cases with 20 deaths and ratios of 1·6 and 0·014 per thousand of population respectively during 1943.

### Tuberculosis.

The total number of cases reported during 1945 was 3,082 with 1,567 deaths or a case-rate of 2·1 and a death-rate of 1·7 per thousand of population.

### Deaths attributed to Confinement.

There were 163 deaths attributed to confinement or a ratio of 1·8 per thousand births as compared with 1·3 in 1944, 1·4 in 1943, 1·9 in 1942, 2·5 in 1941 and 2·1 in 1940.

Out of this figure 51 deaths were caused by puerperal fever with a ratio of 0·5 per thousand births as compared with 0·4 in 1944, 0·51 in 1943, 0·55 in 1942, 0·2 in 1941 and 0·8 in 1940.

112 mothers died within a fortnight of confinement (excluding puerperal fever cases) as compared with 80 in 1944, 52 in 1943, 90 in 1942, 104 in 1941 and 117 in 1940.

The causes of these deaths were as follows:—

30 eclampsia, 32 metrorrhagia, 9 embolism, 12 placenta praevia, 2 caesarean operation, 3 hard labour, 4 rupture of uterus, 3 ectopic gestation, 1 acute hepatitis, 3 toxamia 2 peritonitis, 1 pyelitis, 4 infectious diseases and 1 cancer.

### Disinfection.

Of a total of 154,397 rooms disinfected in 1945, 103,386 were done by Abbassia disinfection station and 51,011 were done by Fom el Khalig disinfection station.

TABLE No. 121.—DISTRIBUTION OF UNCERTIFIED DEATHS AND DEATH INQUIRIES IN THE VARIOUS DISTRICTS IN CAIRO CITY, 1945

District	Total Deaths	Uncertified Deaths					Rate of Uncertified Deaths to Total Deaths %
		No. of deaths investigated by Qism M.O	No. of deaths investigated by Qism Mowalidas	No. invest. by Sanitary Barbers	No. invest. by Sanitary Dayas	Total	
Heliopolis ... ..	1,533	305	370	—	—	675	44·03
Zeitoun ... ..	2,009	400	750	—	—	1,170	58·23
Abbassia ... ..	4,043	518	479	—	—	997	24·65
Ezbekia ... ..	1,437	204	373	—	—	577	40·15
Rod-el-Farag ... ..	3,878	137	1,404	—	—	1,541	39·73
Shoubra ... ..	3,369	104	965	—	—	1,069	31·73
Sharabia ... ..	1,901	347	898	18	41	1,304	68·59
Gamalia ... ..	3,268	979	275	—	—	1,254	37·23
Bab-el-Sharia ... ..	3,068	317	1,199	—	—	1,516	49·41
Abdine ... ..	2,208	478	1,034	—	—	1,512	68·47
Mousky ... ..	799	122	275	—	—	397	49·68
Darb-el-Ahmar ... ..	3,032	516	776	—	—	1,292	42·61
Khalifa ... ..	3,260	565	1,588	—	—	2,153	66·04
Sayeda I ... ..	3,205	471	969	—	—	1,440	44·92
Sayeda II ... ..	2,152	428	917	—	—	1,345	62·50
Boulac I ... ..	3,775	835	2,376	—	—	3,211	85·05
Boulac II ... ..	1,686	553	876	—	—	1,429	84·75
Old Cairo ... ..	3,044	592	1,447	225	17	2,281	74·9
Helwan ... ..	2,102	151	583	755	39	1,528	72·69
<b>TOTAL FOR CAIRO ... ..</b>	<b>49,869</b>	<b>8,042</b>	<b>17,554</b>	<b>998</b>	<b>97</b>	<b>26,691</b>	<b>53·52</b>



TABLE No. 122.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES, 1945

District	Small-pox		Relapsing fever		Cerebro Spinal fever		Typhus fever		Typhoid fever		Scarlet fever		Diphtheria		Measles	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Heliopolis	13	—	295	5	5	2	62	26	197	32	—	—	37	9	41	1
Zeitoun	6	—	49	2	—	—	63	3	105	13	—	—	35	8	31	13
Abbassia	27	3	198	3	3	3	102	44	363	64	1	—	207	90	32	5
Ezbekia	4	—	112	2	1	1	20	8	124	23	—	—	53	12	6	2
Rod-el-Farag	6	—	183	3	1	1	66	22	228	26	—	—	140	37	26	17
Shoubra	4	—	180	7	5	4	102	24	247	27	—	—	134	23	34	15
Sharabia	1	—	111	1	1	—	49	11	83	6	—	—	32	5	15	11
Gamalia	6	—	127	2	4	4	138	26	140	16	—	—	110	21	10	1
Bab-el-Sharia	7	1	123	2	1	1	74	17	205	34	1	—	116	18	29	12
Abdine	2	—	53	—	2	—	76	16	247	25	—	—	101	19	8	3
Mousky	2	—	24	1	1	—	28	4	67	10	—	—	36	4	7	2
Darb-el-Ahmar	7	—	96	2	3	3	66	15	206	16	—	—	127	19	15	3
Khalifa	4	—	98	—	2	—	112	15	211	23	1	—	124	31	33	7
Sayed I	4	—	124	5	—	—	42	12	162	18	—	—	173	20	57	23
Sayed II	6	—	79	—	2	1	60	11	223	26	—	—	122	13	24	6
Boulac I	3	1	288	6	1	1	62	14	110	18	—	—	122	35	15	11
Boulac II	13	—	71	3	2	—	34	4	53	4	—	—	55	15	11	3
Old Cairo	4	—	122	4	2	2	120	18	113	10	—	—	89	21	108	81
Helwan	—	1	71	4	—	—	24	8	61	3	—	—	31	9	6	—
TOTAL FOR CAIRO	121	6	2,404	52	36	23	1,300	298	3,145	394	3	—	1,844	409	508	216

TABLE NO 123.—CASES AND DEATHS OF TYPHOID IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates per cent.
Helicpolis ... ..	58,900	197	3·344	32	0·543	16·24
Zeitoun ... ..	46,300	103	2·028	13	0·281	12·38
Abbassia ... ..	133,200	363	2·725	61	0·480	17·63
Ezbekia ... ..	59,800	124	2·073	23	0·3·4	18·54
Rod-el-Farag ... ..	137,200	228	1·6·1	26	0·189	11·40
Shoubra ... ..	10,000	247	2·445	27	0·2·7	10·93
Shar bia ... ..	41,900	83	1·9·0	6	0·143	7·22
Gamalia ... ..	85,800	110	1·631	16	0·1·6	11·42
Bab-el-Sharia ... ..	1·0,300	205	2·0·3	31	0·338	16·53
Abd'ne ... ..	93,3·0	247	2·647	25	0·267	10·12
Mou:ky ... ..	20,300	67	2·236	10	0·341	14·92
Darb-el-Ahmar ... ..	92,300	206	2·234	16	0·173	7·76
Khalifa ... ..	82,400	211	2·524	23	0·279	10·90
Sayeda I ... ..	73,400	162	2·278	18	0·245	11·11
Sayeda II ... ..	70,100	223	3·1·1	26	0·385	11·65
Boulac I ... ..	85,900	110	1·291	18	0·209	16·36
Boulac II ... ..	56,700	53	0·934	4	0·070	7·54
Old Cairo ... ..	75,300	113	1·506	10	0·132	8·84
Helwan ... ..	54,600	61	1·117	3	0·054	4·91
TOTAL FOR CAIRO	1,477,500	3,145	2·128	394	0·273	12·52

TABLE NO. 124.—TYPHUS CASES AND DEATHS - IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent.
Heliopolis ... ..	58,900	62	1·052	26	0·441	41·93
Zeitoun ... ..	46,300	63	1·36	3	0·064	4·76
Abbassia ... ..	133,200	102	0·076	44	0·330	43·13
Ezbekia ... ..	5·800	20	0·334	8	0·133	40·00
Rod-el-Farag ... ..	137,200	66	0·480	22	0·160	33·33
Shoubra ... ..	11,000	102	1·0·9	24	0·23·	23·52
Shar: bia ... ..	41,900	49	1·1·9	11	0·2·2	22·22
Gamalia ... ..	85,800	138	1·608	26	0·303	18·84
Bab-el-Sharia ... ..	100,300	74	0·737	17	0·169	22·97
Abdine ... ..	93,300	76	0·813	16	0·171	21·05
Mousky ... ..	20,300	28	0·92·	4	0·136	14·25
Darb-el-Ahmar ... ..	92,200	66	0·715	15	0·162	22·72
Khalifa ... ..	82,400	112	1·359	15	0·182	13·39
Sayeda I ... ..	73,400	42	0·572	12	0·163	28·57
Sayeda II ... ..	70,100	60	0·855	11	0·156	18·33
Boulac I ... ..	85,900	62	0·722	14	0·162	22·58
Boulac II ... ..	56,700	34	0·599	4	0·070	11·76
Old Cairo ... ..	75,300	120	1·593	18	0·23·	15·15
Helwan ... ..	54,600	24	0·439	8	0·146	33·33
TOTAL FOR CAIRO	1,477,500	1,300	0·873	298	0·201	22·92



TABLE NO. 125.—DIPHTHERIA CASES AND DEATHS IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Heliopolis ... ..	58,900	37	0·628	9	0·152	24·32
Zeitoun ... ..	46,300	35	0·757	8	0·17	22·85
Abbassia ... ..	133,200	207	1·554	90	0·675	43·47
Ezbekia ... ..	59,800	53	0·886	12	0·200	22·64
Rod-el-Farag ... ..	137,200	140	1·03	37	0·269	26·42
Shoubra ... ..	101,000	134	1·36	23	0·227	17·14
Sharabia ... ..	41,900	32	0·761	5	0·119	15·62
Gamalia ... ..	85,800	110	1·282	21	0·244	19·09
Bab-el-Sharia ... ..	100,300	116	1·156	18	0·179	15·51
Abdine ... ..	93,300	101	1·082	19	0·203	18·81
Mousky ... ..	29,300	36	1·228	4	0·130	11·11
Darb-el-Ahmar ... ..	29,200	127	1·377	19	0·203	14·96
Khalifa ... ..	82,400	124	1·504	31	0·376	25·00
Sayeda I ... ..	73,400	173	2·353	20	0·272	11·56
Sayeda II ... ..	70,100	122	1·740	13	0·185	10·05
Boulac I ... ..	85,900	122	1·420	35	0·407	23·68
Boulac II ... ..	56,700	55	0·970	15	0·264	27·27
Old Cairo ... ..	75,300	89	1·181	21	0·376	23·59
Helwan ... ..	54,600	31	0·567	9	0·164	29·03
<b>TOTAL FOR CAIRO</b>	<b>1,477,500</b>	<b>1,844</b>	<b>1·248</b>	<b>409</b>	<b>0·276</b>	<b>22·18</b>

TABLE NO. 126.—SMALL-POX CASES AND DEATHS IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Heliopolis ... ..	58,900	13	0·220	—	—	—
Zeitoun ... ..	46,300	6	0·129	—	—	—
Abbassia ... ..	133,200	27	0·202	3	0·022	11·11
Ezbekia ... ..	59,800	4	0·066	—	—	—
Rod-el-Farag ... ..	137,200	6	0·043	—	—	—
Shoubra ... ..	101,000	4	0·039	—	—	—
Sharabia ... ..	41,900	1	0·023	—	—	—
Gamalia ... ..	85,800	6	0·069	—	—	—
Bab-el-Sharia ... ..	100,300	7	0·069	1	0·009	14·28
Abdine ... ..	93,300	2	0·021	—	—	—
Mousky ... ..	29,300	2	0·068	—	—	—
Darb-el-Ahmar ... ..	29,200	2	0·021	—	—	—
Khalifa ... ..	82,400	7	0·084	—	—	—
Sayeda I ... ..	73,400	4	0·054	—	—	—
Sayeda II ... ..	70,100	4	0·057	—	—	—
Boulac I ... ..	85,900	6	0·069	1	0·011	16·66
Boulac II ... ..	56,700	3	0·052	—	—	—
Old Cairo ... ..	75,300	13	0·172	—	—	—
Helwan ... ..	54,600	4	0·073	1	0·018	25·00
<b>TOTAL FOR CAIRO</b>	<b>1,477,500</b>	<b>121</b>	<b>0·081</b>	<b>6</b>	<b>0·004</b>	<b>4·95</b>

TABLE NO. 127.—MEASLES CASES AND DEATHS IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rate per cent
Heliopolis ... ..	58,900	41	0.676	1	0.016	2.43
Zeitoun ... ..	46,300	31	0.670	13	0.281	41.93
Abbassia ... ..	133,200	32	0.240	5	0.037	15.93
Ezbekia ... ..	59,800	6	1.003	2	0.033	33.33
Rod-el-Farag ... ..	137,200	26	0.189	17	0.123	65.37
Shoubra ... ..	101,000	31	0.336	15	0.148	44.11
Sharabia ... ..	41,900	15	0.355	11	0.262	73.33
Gamalia ... ..	85,800	10	0.116	1	0.011	10.00
Bab-el-Sharia ... ..	100,300	29	0.289	12	0.119	41.37
Abdine ... ..	93,300	8	0.085	3	0.032	37.50
Mousky ... ..	29,300	7	0.238	2	0.068	28.57
Darb-el-Ahmar ... ..	92,200	15	0.162	3	0.032	20.00
Khalifa ... ..	82,400	33	4.004	7	0.084	21.21
Sayedat I ... ..	73,400	57	0.776	23	0.311	40.33
Sayedat II ... ..	70,100	24	0.342	6	0.085	25.00
Boulac I ... ..	85,900	15	0.174	11	0.128	73.33
Boulac II ... ..	56,700	11	0.194	3	0.052	27.27
Old Cairo ... ..	75,300	108	0.434	81	0.075	75.00
Helwan ... ..	54,600	6	0.109	—	—	—
<b>TOTAL FOR CAIRO</b>	<b>1,477,500</b>	<b>508</b>	<b>0.343</b>	<b>216</b>	<b>0.146</b>	<b>42.51</b>

TABLE NO. 128.—RELAPSING FEVER CASES AND DEATHS IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates-per cent
Heliopolis ... ..	58,900	295	5.008	5	0.084	1.65
Zeitoun ... ..	46,300	49	1.060	2	0.043	4.08
Abbassia ... ..	133,200	198	1.487	3	0.022	1.51
Ezbekia ... ..	59,800	112	1.872	2	0.033	1.78
Rod-el-Farag ... ..	137,200	183	1.333	3	0.021	1.63
Shoubra ... ..	101,000	189	1.782	7	8.069	3.88
Sharabia ... ..	41,900	111	2.639	1	0.002	0.90
Gamalia ... ..	85,800	127	1.480	2	0.023	1.57
Bab-el-Sharia ... ..	100,300	123	1.226	2	0.019	1.62
Abdine ... ..	93,300	53	0.563	—	—	—
Mousky ... ..	29,300	24	0.819	1	0.034	4.16
Darb-el-Ahmar ... ..	29,200	96	1.011	2	0.021	2.08
Khalifa ... ..	82,400	98	1.189	—	—	—
Sayedat I ... ..	73,400	124	1.689	5	0.068	4.83
Sayedat II ... ..	70,100	79	1.126	—	—	—
Boulac I ... ..	85,900	288	1.352	6	0.079	2.08
Boulac II ... ..	56,700	71	1.252	3	0.052	4.22
Old Cairo ... ..	75,300	122	1.620	4	0.053	3.27
Helwan ... ..	54,600	71	1.300	4	0.730	5.03
<b>TOTAL FOR CAIRO</b>	<b>1,477,500</b>	<b>2,404</b>	<b>1.627</b>	<b>52</b>	<b>0.003</b>	<b>2.20</b>



TABLE No. 129. — CASES AND DEATHS OF CEREBRO-SPINAL FEVER IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of population	Case mortality rates per cent
Heliopolis ... ..	58,900	5	0.034	2	0.034	40.00
Zeitoun ... ..	46,300	—	—	—	—	—
Abbassia ... ..	133,200	3	0.022	3	0.022	100.00
Ezbekia ... ..	59,800	1	0.006	1	0.016	100.00
Rod-el-Farag ...	137,200	1	0.007	1	0.007	100.00
Shoubra ... ..	101,000	5	0.009	4	0.009	80.00
Sharabia ... ..	41,900	1	0.023	—	—	—
Gamalia ... ..	85,800	4	0.046	4	0.046	100.00
Bab-el-Sharia ...	100,300	1	0.009	1	0.009	100.00
Abdine ... ..	93,300	2	0.021	—	—	—
Mousky ... ..	21,300	1	0.004	—	—	—
Darb-el-Ahmar ...	92,200	3	0.032	3	0.032	100.00
Khalifa ... ..	82,400	2	0.024	—	—	—
Sayeda I ... ..	73,400	—	—	—	—	—
Sayeda II ... ..	70,100	2	0.023	1	0.004	50.00
Boulac I ... ..	85,900	1	0.011	1	0.011	100.00
Boulac II ... ..	56,700	2	0.035	—	—	—
Old Cairo ... ..	75,300	2	0.026	2	0.026	100.00
Helwan ... ..	54,600	—	—	—	—	—
<b>TOTAL FOR CAIRO</b>	<b>1,477,500</b>	<b>36</b>	<b>0.024</b>	<b>23</b>	<b>0.015</b>	<b>63.88</b>

TABLE No. 127. — SCARLET FEVER CASES AND DEATHS IN CAIRO DISTRICTS IN 1945

District	Population	Number of Cases	Case-rates per 1000 of population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Heliopolis ... ..	58,900	—	—	—	—	—
Zeitoun ... ..	46,300	—	—	—	—	—
Abbassia ... ..	133,200	1	0.007	—	—	—
Ezbekia ... ..	59,800	—	—	—	—	—
Rod el Farag ...	137,200	—	—	—	—	—
Shoubra ... ..	101,000	—	—	—	—	—
Sharabia ... ..	41,900	—	—	—	—	—
Gamalia ... ..	85,800	—	—	—	—	—
Bab el Sharia ...	100,800	1	0.009	—	—	—
Abdine ... ..	23,300	—	—	—	—	—
Mousky ... ..	29,300	—	—	—	—	—
Darb el Ahmar ...	92,200	—	—	—	—	—
Khalifa ... ..	82,400	—	—	—	—	—
Sayeda I ... ..	73,400	1	0.013	—	—	—
Sayeda II ... ..	70,100	—	—	—	—	—
Boulac I ... ..	85,900	—	—	—	—	—
Boulac II ... ..	56,700	—	—	—	—	—
Old Cairo ... ..	75,300	—	—	—	—	—
Helwan ... ..	54,600	—	—	—	—	—
<b>TOTAL FOR CAIRO</b>	<b>1,477,500</b>	<b>3</b>	<b>0.002</b>	<b>—</b>	<b>—</b>	<b>—</b>

### Abbassia Fever Hospital

No. of cases admitted to hospital during the last three years were.

1943	—	32,251	} Including persons accompanying patients
1944	—	12,517	
1945	—	14,115	

11,894 patients were treated during the year 1945 of whom 1,106 died, or a ratio of 9.3 per cent. The remaining 2,221 were persons accompanying patients.

The following tables show cases admitted to hospital, their age and sex distribution, number of deaths and percentage.

TABLE No. 131—GOVERNMENT FEVER HOSPITAL, ABBASSIA, 1945

Diseases	1944		1945									
	Cases admitted		Cases admitted within 3 days		Cases admitted within 4 days		Cases admitted after 7 days		C. sent by Health Offices	Cases sent by Hospitals	Cases sent by Private Practitioners	C. arriving on their own account
	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.				
Typhus ...	669	182	234	64	388	72	343	86	469	127	256	113
Small pox ...	1,281	36	69	2	64	1	22	—	58	43	32	22
Plague ...	15	2	—	—	—	—	—	—	—	—	—	—
Typhoid ...	1,073	128	235	29	388	48	605	58	282	123	504	319
Para Typhoid ...	398	19	81	5	171	13	214	18	146	95	136	19
Diphtheria ...	569	79	333	120	224	73	92	42	124	174	223	134
Pneumonia ...	437	82	141	24	197	39	99	21	155	109	105	68
Influenza ...	1,690	1	1,100	—	624	—	197	—	777	397	431	256
Measles ...	309	26	41	2	23	1	11	—	17	22	21	15
Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	1
Chicken-Pox ...	57	—	13	—	7	—	—	—	8	4	5	3
Cerebro-Spinal Fever ...	33	24	14	10	3	2	3	2	3	5	8	4
Whooping Cough ...	40	3	5	—	13	1	14	—	4	14	4	11
Tetanus ...	33	14	16	6	20	10	3	3	4	15	17	3
Puerperal Fever ...	40	10	11	3	14	3	7	2	8	13	8	3
Relapsing Fever... ..	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ...	208	13	152	3	74	4	34	2	54	115	64	27
Other Diseases ...	3,875	476	—	—	—	—	—	—	1,462	909	1,254	771
TOTAL	10,727	1,095	2,452	268	2,210	267	1,644	234	2,963	2,413	3,465	2,053



TABLE No. 132.—DIPHTHERIA

Age		Male			Female			Total			Swab		Took 3 inj. before one month			No. of carriers
		No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	Pos.	Neg.	No. of Cases	No. of Deaths	%	
Less than 1 year	...	95	48	50.5	69	28	40.6	164	76	46.3	98	66	—	—	—	—
1-2 years...	...	82	33	40.2	60	21	35	142	54	38	78	64	32	8	25	—
2-5 "	...	74	27	36.5	51	19	37.3	125	46	27.2	68	57	24	6	25	—
5-10 "	...	51	16	31.8	39	13	33.3	90	29	32.2	47	43	26	5	19.2	—
10-15 "	...	39	10	25.4	25	8	32	64	18	28.1	38	26	13	2	15.4	7
15-25 "	...	21	6	28.6	10	1	10	31	7	22.6	19	12	2	—	—	4
25-35 "	...	15	3	20	8	1	12.5	23	4	17.4	16	7	—	—	—	2
35-45 "	...	8	—	—	4	—	—	12	—	—	7	5	—	—	—	1
45-65 "	...	1	—	—	3	1	33.3	4	1	25	3	1	—	—	—	—
More than 65 years	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	...	386	143	37.1	269	92	34.2	655	235	35.9	374	281	97	21	21.6	15

TABLE NO. 133—PNEUMONIA

Age	Male			Female			Total			Lobar PN.	Broncho PN.
	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent		
						%					
Less than 1 year.	17	6	35.3	10	2	20	27	8	29.6	7	20
1-2 years	20	7	35	9	2	22	29	9	31.1	11	18
2-5 "	30	5	16.7	15	3	20	45	8	17.8	15	30
5-10 "	22	5	22.7	16	1	6.2	38	6	15.8	17	21
10-15 "	29	4	13.8	13	2	15.2	42	6	14.3	26	16
15-25 "	91	6	6.6	10	4	40	101	10	9.9	67	34
25-35 "	58	7	12.1	15	2	13.3	73	9	12.3	52	21
35-45 "	34	12	35.3	7	3	42.9	41	15	36.6	24	17
45-65 "	29	9	31.1	8	3	37.5	37	12	32.3	24	13
More than 65 years	4	1	25	—	—	—	4	1	25	1	3
TOTAL ...	334	62	18.6	103	22	21.4	437	84	19.2	244	193

TABLE NO. 134—TYPHOID

AGE	MALE			FEMALE			TOTAL			No. of samples		Took 2 inj. at least 1 month		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of cases	No. of Deaths	Mortality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%					%
Less than 1 year	3	1	33.3	4	1	25	7	2	28.6	4	3	—	—	—
1-2 years	32	7	21.9	25	2	8	57	9	15.8	35	22	—	—	—
2-5 "	78	8	10.3	51	5	9.8	129	13	10.1	76	53	4	1	25
5-10 "	106	12	11.3	68	6	8.8	174	18	10.4	113	61	8	1	12.5
10-15 "	110	9	8.2	87	8	9.2	197	17	8.6	120	77	19	3	15.8
15-25 "	185	21	11.4	119	12	10.1	304	33	10.9	214	90	45	2	4.4
25-35 "	107	11	10.3	60	8	13.3	167	19	11.6	113	54	26	1	8.3
35-45 "	68	9	13.2	42	5	11.9	110	14	12.7	76	34	18	2	11.1
45-65 "	44	4	9.1	21	2	9.5	65	6	9.2	39	26	17	1	5.9
More than 65,,	15	3	20	3	1	33.3	18	4	22.2	12	6	3	1	33.3
TOTAL ...	748	85	11.3	480	50	10.4	1,228	135	10.9	802	426	140	12	8.6

TABLE NO. 130.—TYPHUS

AGE	MALE			FEMALE			TOTAL			No. of W.F. samples		Took 3 inj. before one month		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%					%
Less than 1 year	4	1	25	1	—	—	5	1	20	3	2	—	—	—
1-2 years ...	7	3	42.9	4	2	50	11	5	45.5	9	2	—	—	—
2-5 " ...	30	7	23.3	31	5	16.1	61	12	19.7	47	14	—	—	—
5-10 " ...	49	9	18.4	38	5	13.2	87	14	16.1	65	22	—	—	—
10-15 " ...	59	13	22.1	50	10	20	109	23	21.1	84	25	—	—	—
15-25 " ...	184	41	22.3	137	19	13.9	321	60	18.7	261	60	3	1	33.3
25-35 " ...	106	31	29.2	75	17	22.7	181	48	26.5	145	36	1	—	—
35-45 " ...	74	29	39.2	43	10	23.3	117	39	33.3	86	31	—	—	—
45-65 " ...	41	9	21.9	25	8	32	66	17	25.8	46	20	—	—	—
More than 65 years	5	2	40	2	1	50	7	3	42.9	5	2	—	—	—
TOTAL ...	559	145	25.9	406	77	18.9	965	222	23.1	751	214	4	1	2



TABLE No. 136.—SMALL-POX

AGE		MALE			FEMALE			TOTAL			Not Vaccinated in Infancy			Vaccinated one year ago			Vaccinated 1-3 Years ago		
		No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%
Less than 1 year	...	17	—	—	12	—	—	29	—	—	6	—	—	—	—	—	—	—	—
1-2 years	...	12	—	—	11	2	18.2	23	2	8.7	—	—	—	—	—	—	—	—	—
2-5 "	...	7	—	—	11	—	—	18	—	—	—	—	—	1	—	—	—	—	—
5-10 "	...	5	—	—	9	—	—	14	—	—	—	—	—	1	—	—	—	—	—
10-15 "	...	2	—	—	4	—	—	6	—	—	—	—	—	2	—	—	—	—	—
15-25 "	...	41	1	24.4	3	—	—	44	1	2.3	—	—	—	4	—	—	2	—	—
25-35 "	...	16	—	—	2	—	—	18	—	—	—	—	—	1	—	—	2	—	—
35-45 "	...	1	—	—	1	—	—	2	—	—	—	—	—	1	—	—	—	—	—
45-65 "	...	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
More than 65 years	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL		102	1	9	53	2	3.7	155	3	1.9	6	—	—	10	—	—	4	—	—

TABLE No. 137.—PARA-TYPHOID

AGE	MALE			FEMALE			TOTAL			Samples of W.		Took 2 in before one month		
	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	Pos.		Cases	Death	%
Less than 1 year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years ... ..	2	—	—	2	1	50	4	1	25	3	1	—	—	—
2- 5 „ ... ..	15	—	—	8	—	—	23	—	—	21	2	2	—	—
5-10 „ ... ..	19	3	15.8	15	2	13.3	34	5	14	32	2	3	—	—
10-15 „ ... ..	45	—	—	22	2	9.1	67	2	2.8	61	6	6	—	—
15-25 „ ... ..	168	5	2.9	48	5	10.4	217	10	4.6	207	10	10	1	10
25-35 „ ... ..	53	3	5.7	17	3	17.6	70	6	8.6	67	3	4	—	—
35-45 „ ... ..	28	5	17.8	9	—	—	37	5	13.8	34	3	5	—	—
45-65 „ ... ..	8	5	62.5	5	2	40	13	7	53.8	13	—	—	—	—
More than 65 years ... ..	—	—	—	1	—	—	1	—	—	1	—	—	—	—
TOTAL ... ..	399	21	5.3	177	15	8.4	4.66	36	7.7	439	27	30	1	3.3

TABLE No. 133-CEREBRO-SPINAL FEVER.

AGE	MALE			FEMALE			TOTAL			Samples of C.S.F.		Swabs from Throat	
	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	Pos.	Neg.	Pos.	Neg.
Less than 1 year ... ..	3	1	33	1	1	100	4	2	50	—	—	—	—
1- 2 years ... ..	1	—	—	—	—	—	1	—	—	—	—	—	—
2- 5 „ ... ..	2	2	100	1	1	100	3	3	100	—	—	—	—
5-10 „ ... ..	4	3	75	—	—	—	4	3	75	—	—	—	—
10-15 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
15-25 „ ... ..	1	—	—	—	—	—	1	—	—	—	—	—	—
25-35 „ ... ..	3	3	100	2	1	50	5	4	80	—	—	—	—
35-45 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
45-65 „ ... ..	1	1	100	—	—	—	1	1	100	1	—	—	—
More than 65 years ... ..	1	1	100	—	—	—	1	1	100	1	—	—	—
TOTAL ... ..	16	11	68	4	3	75	20	14	70	2	—	—	—



TABLE No. 139.—RELAPSING FEVER

Age	Male		Female		Total			Blood C.			Treated with 1 inj. of N.A.B.					Control Cases (without inj.)					
	No. of Cases	No. of Deaths	No. of Cases	No. of Deaths	No. of Cases	No. of Deaths	%	Neg.	Pos.	Neg. %	Pos. %	No. of Cases	No. of 1 Relapse C	No. of 2. Relapse C.	1 Relapse %	2 Relapse %	No. of Cases	No. of 1. R.	No. of 2. R. C	1 R. %	2 R. %
Less than 1 year	3	—	6	—	9	—	—	3	6	33.3	66.7	—	—	—	—	—	9	6	—	66.6	—
2-5 years	24	—	11	—	35	—	—	13	22	37.1	62.9	—	—	—	—	—	35	25	2	71.4	5.4
5-10	39	—	37	—	76	—	—	24	52	31.5	68.5	2	—	—	—	—	74	47	5	63.5	6.7
10-15	85	2	31	1	116	3	2.4	38	78	32.7	67.3	5	2	—	40	—	111	66	6	59.5	5.7
15-25	446	6	77	—	523	6	1.1	148	375	26.3	73.7	31	5	—	16.1	—	492	363	19	73.8	3.8
25-35	236	6	61	—	297	6	2.2	85	212	28.6	71.4	16	2	1	12.5	6.25	281	174	7	62	2.9
35-45	69	3	25	—	94	3	3.2	25	69	26.5	73.5	9	2	—	22.2	—	85	53	3	62.3	3.5
45-65	28	—	12	—	40	—	—	12	28	30	70	4	—	—	—	—	36	20	1	65.5	2.7
More than 65 years	1	—	—	—	1	—	—	—	1	—	10.0	1	—	—	—	—	—	—	—	—	—
TOTAL	931	17	260	1	1,191	18	1.6	348	843	22.3	77.7	68	11	1	16.1	1.1	1,123	754	43	67.1	3.8

TABLE No. 140.—ERYSIPELAS

Age.	Male			Female			Total			Treatment Serum & Sulphanilamide Comp.			Treat. with Sulphanilamide alone		
	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%
Less than 1 year ... ..	10	2	20	8	—	—	18	2	11.1	1	1	100	17	1	5.9
1- 2 years ... ..	5	—	—	3	—	—	8	—	—	—	—	—	8	—	—
2- 5 ... ..	1	—	—	1	—	—	2	—	—	—	—	—	2	—	—
5-10 ... ..	4	—	—	6	—	—	10	—	—	—	—	—	10	—	—
10-15 ... ..	10	1	10	8	—	—	18	1	5.5	—	—	—	18	1	5.5
15-25 ... ..	56	2	3.6	19	1	5.3	75	3	4	2	2	100	73	1	1.4
25-35 ... ..	31	—	—	26	1	3.8	57	1	1.7	—	—	—	57	1	1.7
35-45 ... ..	21	1	4.8	17	—	—	38	1	2.7	—	—	—	38	1	2.7
45-65 ... ..	17	1	5.9	13	—	—	30	1	3.3	1	1	100	29	—	—
More than 65 years ... ..	3	—	—	1	—	—	4	—	—	—	—	—	4	—	—
TOTAL ... ..	158	7	4.4	102	2	1.9	260	9	3.5	4	4	100	256	5	1.9



## PASSENGERS CONTROL SECTION

### *Passengers .*

During 1945, 23,409 passengers arrived in Cairo from infected countries, as compared with 15,745 in year 1944. Of this number, 7,174 passengers arrived by air, 1 314 passengers via Suez, 5,039 passengers arrived via Kantara, 1,256 passengers arrived by car via Ismailia, 375 passengers arrived by sea via Alexandria, and 56 passengers arrived via PORT SAID

Moreover, 8,915 passengers arriving from the Sudan through Shallal were observed for small-pox, meningitis, relapsing and yellow fevers.

All the passengers (with the exception of 142, who could not be traced), were observed during the regulation period, giving a ratio of 99% observed.

### *Pilgrims .*

The number of pilgrims arriving from the Hedjaz was 3,287 as compared with 2,281 in the previous year. All the returning pilgrims (except 25 who could not be traced) underwent the regulation period of observation and were found in good health.

Four pilgrims reported sick and diagnosed as follows :—

- |                               |                       |
|-------------------------------|-----------------------|
| 1. Ascites and odema of legs. | 1. Chronic nephritis. |
| 1. Diabetes and Gangrene.     | 1. Paratyphoid.       |

### *Deaths .*

4 pilgrims died from normal diseases, one pilgrim died in the Hedjaz and 6 pilgrims remained there.

Officials and Employees of El-Tor Mission numbering 56 were observed and found in good health.

## PROSTITUTES

The total number of registered prostitutes for the year 1945 was 551, as compared with 629 in 1944. 44 were struck off the register during the year.

The total number of examinations held was 24,792. 139 prostitutes were found suffering from Venereal diseases distributed as follows :—

Bartolinitis	1
Chronic Gonorrhoea	10
Primary Syphilis	7
Secondary „	115
Soft Sore.	6
	<hr/>
	139
	<hr/>

The number of arrested women was 1,139. compared with 2,609 in the year 1944. The incidence of disease amongst them was as follows :—

Chronic Gonorrhœa	107
Bartolinitis	1
Primary Syphilis	18
Secondary „	300
Soft Sore	6
Venereal warts	3
Scabies	25
	<hr/>
	460
	<hr/>

Wassermann Examination of the blood :—

Prostitutes	107 were found positive out of 551
Arrested women	307 were found positive out of 675

*Complaints against prostitutes.*

11 (eleven) complaints were received, 3 were found suffering from latent syphilis (Wassermann positive) and 8 proved to be false.



## POLICE HEALTH OFFICE

The strength of the Cairo City Police was 9 953 men in 1945. The following is a brief statement of the work carried out by this office during the year.

### MEDICAL WORK

Policemen examined for sick leaves ... ..	338
Other police personnel examined for sick leaves ... ..	868
Medico-Legal reports ... ..	3,304
Persons stung by scorpion and received injections... ..	865
Car and cab drivers examined for practising profession ... ..	6,846
Candidates examined for police service ... ..	215

### SANITARY WORK

No. of inspections of police units ... ..	102
No. of personnel vaccinated against small-pox ... ..	409
No. of personnel vaccinated against typhoid (2 injections) ... ..	6505

It is observed that the most prevalent diseases among non-commissioned officers and men were : rheumatism, bronchitis, wounds, and enteritis.

The number of cases of these diseases were 996, 914, 745 and 734 respectively.

The most prevalent diseases among officers and civilians were : rheumatism, bronchitis, enteritis and tonsilitis.

The number of cases of these diseases were 214, 168, 102 and 81 respectively.

28 members of the police force were sent to the fever hospital suffering from typhoid and paratyphoid.

367 persons were put under observation for infectious diseases during the year.

### UNHEALTHY, INCONVENIENT, AND DANGEROUS ESTABLISHMENTS

Under Law No. 13 of 1904, the following unhealthy, inconvenient and dangerous establishments were licensed during the year 1945 :—

	<i>Shaha</i>	<i>Zabt</i>	TOTAL
1st class ... ..	157	135	<b>292</b>
2nd class ... ..	529	183	<b>702</b>
3rd class ... ..	331	105	<b>436</b>
Grand Total ... ..			<b>1480</b>

The number of establishments inspected this year was 19,132 of which 15,261 complied with sanitary conditions while in the remaining 3,871, the sanitary conditions were lacking.

2 368 procès-verbaux were drawn up during the year 1945 against owners of unlicensed establishments, and 2603 against owners of licensed establishments, making a total of 4,971.

4 Ministerial Arrêtes were issued during the year.

Under Law No. 1 of 1904 substituted by Law No. 38 of 1940, 91 theatres, cinemas and other establishments were inspected during the year.

## SANITATION

The activities of the sanitation section during the year 1945 can be summarised as follows.

### 1.—Water.

Samples of water have been regularly taken from the different main water supplies of the City, Giza and Helwan in order to ensure the good quality of the water. Also samples of water have been taken from taps in different parts of the City and swimming baths.

### 2.—Free water taps.

5 free water taps have been provided.

### 3.—Slope water gulleys.

5 slope water gulleys have been erected in poor quarters to stop inhabitants throwing their waste water into the streets.

### 4.—Water system of private buildings.

20 water systems of private buildings were approved at Helwan.

### 5.—Quack Doctors Squad.

This squad continued to hunt quack doctors and ambulant vendors selling medicines and drugs without licences.

### 6.—Complaints.

3311 complaints were received and dealt with during the year regarding waste lands, cleanliness of streets and sanitary systems of houses.

### 7.—Vidange.

500 permits were given for evacuation of private cisterns.

## NUMBER OF MILK SAMPLES TAKEN DURING 1945 AND THE RATE OF ADULTERATION THEREIN

Number of Samples	Adulterated Samples						Total number of adult. samples	Number of genuine samples	Percentage of adulteration
	Skimmed Samples		Samples to which water was added		Samples skimmed and to which water was added				
	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.			
5,871	692	11.8 %	87	1 5 %	80	1.4 %	859	5,012	14.6 %

N.B. : In addition, 6 Samples were taken for Bacteriological examination but were found decomposed.

## LIST OF CONTRAVENTIONS MADE DURING THE YEAR 1945

### IN APPLICATION OF THE FOLLOWING ACTS :—

No. of Procès-Verbaux drawn up under Law No. 48 of 1941	No. of Procès-Verbaux drawn up under Arrêté of the Ministry of Interior No. 73 of 1943 re. Vendors.	No. of Procès-Verbaux drawn up against milk vendors under Arrêté of Ministry of Interior dated 18.5.1925	No. of Procès-Verbaux drawn up under Arrêté of Cairo Governorate dated 27.3.911 re Markets.	No. of Procès-Verbaux drawn up under Arrêté 275 dated 6.10.945 re. Alcoholic Liquors.	Procès-Verbaux drawn up under Law No. 96 re. Flour.	Procès-Verbaux drawn up under Law 108 of 1945 re. refuse.
1,078	2,765	760	120	50	5	2

Number of milk vendors licensed ... .. 191

„ ambulant vendors licensed... .. —

„ cases of food poisoning ... .. 627

„ complaints received and dealt with... .. 576









## Boulac Polyclinic 1945

### Surgical Section.

Persons treated in this section during the year were 26,346 (10,181 new cases and 16,165 old cases).

In this clinic minor operations, such as openings, epilation, sebaceous cysts, inserting gypsum for cases of small fractures or dislocation, are done.

Besides, piles are treated every Tuesday afternoon.

Cases treated amounted to 2,538 of whom 553 were new patients and the remaining 1,985 were old.

### *In-Patients Section.*

7 cases remaining from 1944

212 new cases

---

219 total distributed as follows :-

129 cured

65 improved

15 no improvement

2 died

8 under treatment on 31.12.1945

---

219 total

### Endemic Diseases Section.

22,955 new cases

22,262 urinary analysis

16,108 stool analysis

The result was :-

4,434 Suffering from Schistosomiasis

72 „ „ Amcebic Dysentery

47 „ „ Amoebic Cysts

1,634 „ „ Ancylostoma

2,496 „ „ Ascaris

1,951 „ „ Other Parasites

---

10,634

25,182 injections given to those suffering from Schistosomiasis

386 injections given to those suffering from Dysentery

1,095 Schitosomiasis patients completed treatment

58 Dysentery patients completed treatment

1,966 Treated from Ancylostoma

2,750 Treated from Ascaris

145 Treated from other parasites

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31582

### Child Welfare Section

Children treated in this section during the year were 42,742:

38,13 new cases, and 38,929 old cases.

Results of exams. of old cases were as follows :—

9,084 Enteritis  
7,139 Pneumonia  
84 Infectious diseases  
116 Hereditary syphilis  
5,890 Skin diseases  
10,024 other diseases  
100 vaccinated against Small-pox  
880 inoculated „ Diphtheria  
5,612 attended lectures

---

38,929 Total

478 visits were paid to homes of children.

### Ophthalmic Section

#### *Out-Patient Clinic.*

Number of cases treated in this section during the year was 128,063 distributed as follows :—

10,458 treatment postponed  
90,014 under treatment  
27,591 new patients  

---

11,557 cured  
14,220 improved

Operations done were 3,512 (1,254 major operations, and 2,258 minor ones) 106 spectacles ordered.

#### *In-Patient Section.*

4 remaining from previous year  
93 new patients  

---

97 distributed as follows :

74 cured  
11 improved  
6 no improvement  
6 under treatment on 31/12 /1945  

---

97

### Dental Section

Persons treated in this section during the year were 5,185

4,739 new cases and 446 old cases,



## Gynaecological and Obstetric Section

### *Gynaecological Out-patient Clinic*

Persons treated in the section during this year were 2,998 new cases and 9,562 old cases

### *In-Patient Clinic.*

7 remaining from previous year—
217 new patients
<hr/>
224 distributed as follows :
151 cured
19 improved
43 no improvement
1 died
10 under treatment on 31-12-1945
<hr/>
<u>224</u>

### *Obstetrics Out-Patient Clinic.*

Cases of confinement attended by the section during the year outside the Polyclinic amounted to 2,039

### *In-Patient Clinic.*

4 remaining from previous year
59 new patients
<hr/>
63 distributed as follows :—
60 cured
2 improved
1 no improvement
<hr/>
63

## Venereal and Skin Diseases Section

Persons treated in this section during the year were 55,893 distributed as follows :—

625 new syphilis cases
996 gonorrhoea cases
34,550 old gonorrhoea and syphilis cases
2,244 blood samples for Wassermann
14,813 new skin diseases cases
2,665 skin diseases (old cases)
<hr/>
<u>55,893</u>

### Medical Diseases Section

#### *Out-Patient Clinic.*

Persons treated in this section during the year were 45,512 new cases, and 24,777 old cases.

#### *In-Patient Clinic.*

6 remaining from previous year  
103 new patients

---

109 distributed as follows.

23 cured  
59 improved  
15 no improvement  
7 died  
5 under treatment on 31/12/1945

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109

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### Ear, Nose, and Throat, Section

#### *Out-Patient Clinic.*

Persons treated in this section during the year were 5,915 new cases, and 2,433 old cases

#### *In-Patient Clinic.*

new cases distributed as follows :—

74 cured  
9 improved  
6 no improvement  
5 under treatment on 31/12/1945

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94

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### Chest Diseases Section

10,407	New patients treated during the year 1945
917	T.B. cases treated during the year 1945
484	patients referred to Sanatorium
335	patients admitted to Sanatoria
1,044	contacts examined
29	contacts suffering from T.B.
2,280	sputum samples examined
1,417	X-ray
8,015	Old cases
2,330	Home visits by nurses
334	Home visits by doctors
404	Patients left sanatorium
248	Patients improved
53	Patients not improved
62	Patients became worse
41	Patients died
46	Patients treated by Pneumothorax operation
651	Pneumothorax operations
216	T.B. deaths

### *In-Patient Section (Total).*

33	remaining from 1944
847	new cases
<hr/>	
880	distributed as follows :
578	cured
166	improved
86	noimprovement
16	died
34	under treatment on 31/12/1945.











